

A Shaky Future for Personality Disorders

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The major accomplishment of the fourth edition of the American Psychiatric Association's diagnostic manual was not in the development of surprising new content but rather in the careful, cautious, and systematic method with which it was constructed. The authors of the forthcoming fifth edition may have reversed the priorities, instead emphasizing radical changes without first conducting careful, systematic, thorough, or objective reviews of the scientific literature. Of particular concern are the proposals to cut half of the diagnoses from the manual, to abandon diagnostic criterion sets, and to include a dimensional model that lacks empirical support, fails to be integrated with normal personality functioning, and will lack official recognition.

Keywords: DSM-5, personality disorder, prototype, diagnosis, dimensional

On February 10, 2010, the official proposals for the personality disorders section of the fifth edition of the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) were posted online (see <http://www.dsm5.org>), along with a discussion of their rationale and empirical support. Dr. Andrew E. Skodol (2010), chair of the DSM-5 Personality and Personality Disorders Work Group, states that "the work group recommends a major reconceptualization of personality psychopathology" ("Reformulation of personality disorders in DSM-5," para. 1). These proposals include the removal of half of the diagnoses, replacing diagnostic criterion sets with prototype matching, the inclusion of a rating for the level of social and interpersonal functioning, and a six-domain, 37-trait dimensional model. The proposals, being so extensive, have generated some controversy. Dr. John G. Gunderson, for instance, spearheaded a formal objection, signed by personality disorder clinicians and researchers, that argued, in large

part, that "the magnitude of the changes is unjustified" (J. G. Gunderson, personal communication, June 6, 2010).

The chief architects of DSM-IV stated that "the major innovation of DSM-IV will not be in its having surprising new content but rather will reside in the systematic and explicit method by which DSM-IV will be constructed and documented" (Frances, Widiger, & Pincus, 1989, p. 375). The authors of DSM-5 may have flipped this priority on its head, with emphasis now given to surprising new content and less attention given to first conducting systematic, thorough, and balanced reviews to ensure that the proposals have adequate justification and empirical support (Frances, 2009). This paper will begin with a discussion of the four-step diagnostic procedure proposed for DSM-5, followed by a discussion of the proposals to delete half of the diagnoses, to shift from diagnostic criterion sets to prototype matching, and to include a six-domain, 37-trait dimensional model. The primary concern in each of the three latter cases will be the extent of empirical support.

DSM-5 Four-Step Procedure

Skodol (2010) describes a four-step assessment. Clinicians first provide, on a 5-point scale, a rating for the level of self and interpersonal functioning. The level of self includes a consideration of identity integration, integrity of self-concept, and self-directedness; the level of interpersonal functioning includes degree of empathy, intimacy and cooperativeness, and

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complexity and integration of representation of others. Next, clinicians match the patient on a 5-point scale to narrative descriptions of five personality disorder prototypes (each consisting of approximately 10–17 sentences). Clinicians then describe the patient in terms of 37 maladaptive personality traits, each scored on a 4-point scale and organized within six broad domains (an alternative format is to provide the 37-trait description prior to matching to the five prototypes). Clinicians then assess for adaptive failure as part of the definition of personality disorder. If the patient is judged to meet the threshold for a personality disorder, then the code number for one of the five types—or, alternatively, for a “not otherwise specified” type—is provided.

The 37 traits can be used in two different ways. First, they can be used as diagnostic criteria for the personality types. This usage, however, is likely to be confined to types other than borderline, antisocial, avoidant, schizotypal, or obsessive-compulsive. Prototype narratives for the diagnosis of these five types are also provided; these narratives are likely to have priority in diagnosis.

The primary usage of the traits would be the provision of an alternative method for describing patients. The ultimate purpose of a dimensional model of personality disorder is not to provide just another way of returning to a categorical diagnosis (Clark, 2007; Widiger & Trull, 2007). In other words, rather than describe a patient in terms of one or more of the five types, one would describe the patient in terms of the six domains and 37 traits.

It is difficult to believe that clinicians will really proceed through all four steps. Some of the components of the level of self and interpersonal functioning are rather complex (e.g., regulation of self-states includes coherence of sense of time and personal history, ability to experience a unique self and to identify clear boundaries between self and others, and capacity for self-reflection). Many of the traits also include a number of components, each of which should be assessed. For example, the trait of aggressiveness requires consideration of whether the person is mean, cruel, or cold-hearted; is verbally, relationally, or physically abusive; willingly and willfully engages in behaviors that humiliate and demean others; engages in acts of violence against persons and objects; is actively and openly belligerent or

vengeful; and/or uses dominance or intimidation to control others (Clark & Krueger, 2010). A long-raised concern for a dimensional model is the complexity of this descriptive task (First, 2005). Clinicians will find describing patients in terms of 37 traits to be very cumbersome, resulting in lengthy and complex profiles that will be difficult to process and communicate (see Widiger & Mullins-Sweatt, 2009, for a potential simplification).

It is also important to appreciate that only one part of the four steps is likely to have any official representation within a patient’s medical record, that is, which of the five personality types is present. The medical record consists of the code numbers provided within the diagnostic manual (e.g., the code number for borderline personality disorder is 301.83). It is these code numbers that are used by other agencies, such as insurance companies. Disorders that lack a specific code number are instead given the code number for “personality disorder, not otherwise specified” (PDNOS). Unless an official coding system is provided for the six domains and 37 traits, their only representation within an official medical record will be the catchall wastebasket diagnosis of PDNOS. Obtaining official code numbers for the six domains and 37 traits will be difficult for a number reasons (e.g., they will directly conflict with the coding for the five personality types, and such a complex new coding system is likely to be met with considerable resistance). In sum, clinicians will most likely just proceed to the prototype matching, skipping the level of functioning and 37 traits, in large part because only the five types will likely have any official representation within a patient’s medical record, and prototype matching is relatively simple.

Deletion of Half of the Diagnoses

Half of the DSM-IV diagnostic categories are proposed for deletion (i.e., dependent, narcissistic, paranoid, schizoid, and histrionic). The rationale for cutting certain categories is to reduce diagnostic co-occurrence (Skodol, 2010). Diagnostic co-occurrence has been a significant problem for the categorical diagnoses (Widiger & Trull, 2007), but sacrificing fully half of them would seem to be a rather draconian approach for addressing this problem. Two primary concerns with respect to this proposal are the loss of

coverage and lack of empirical support for which diagnoses are to be deleted.

Lack of Coverage

It does not speak well for the credibility of the field of personality disorder to be so willing to sacrifice half of its coverage in order to address diagnostic co-occurrence. It is as if half of what we have been diagnosing and treating for the past 30 years was not worth the clinical attention. Imagine if these were real illnesses with a problematic diagnostic co-occurrence and the American Medical Association decided to address the problem by simply denying the existence of half of them. Persons will still have dependent, schizoid, paranoid, histrionic, and narcissistic personality traits despite their diagnoses being deleted from the manual of disorders. Lack of adequate coverage has been a problem of comparable magnitude that has occurred for diagnostic co-occurrence (Verheul & Widiger, 2004). This problem will be substantially magnified in DSM-5.

Skodol (2010) states that the personality disorders are not actually being deleted, as their traits are among those included within the dimensional model. However, as noted earlier, the dimensional ratings are unlikely to have official coding. No record of these traits would be included within the medical record (other than within the catchall wastebasket diagnosis of PDNOS). As a result, dependent, narcissistic, paranoid, histrionic, and schizoid personality traits are being effectively deleted from the manual.

Empirical Support

In the APA guidelines for the deletion of a diagnostic category, emphasis is given to an absence of clinical utility and construct validity (Kendler, Kupfer, Narrow, Phillips, & Fawcett, 2009). Skodol (2010) alludes to these guidelines when he states there is extensive empirical support for the utility and validity of the antisocial (psychopathic), borderline, and schizotypal personality disorders. This statement is followed by a few sentences that refer, in passing, to level of impairment, prevalence, mental health treatment utilization, and/or economic burden for one or more of the diagnoses that will be re-

tained. There does not appear to have been an effort to methodically compare the 10 current personality disorders with respect to any one of these concerns. A few disparate studies are cited to justify the retention of the avoidant and obsessive-compulsive personality disorders, but no studies are provided to justify the deletion of the narcissistic, dependent, schizoid, histrionic, or paranoid types. There does not appear to have been a review of the literature to determine whether these personality disorders lack clinical utility or construct validity.

Blashfield and Intoccia (2000) compared the DSM-IV personality disorders with respect to extent of published research. They conducted a computer search using the full title of each personality disorder (e.g., "narcissistic personality disorder"). Consistent with Skodol (2010), they reported that "only three personality disorders (antisocial, borderline, and schizotypal) had literatures that were alive and well" (Blashfield & Intoccia, 2000, p. 473). However, a major limitation of their search is that they missed a large number of studies that failed to include the complete, formal name of the respective personality disorder within the article's title.

Table 1 provides the results of a search of abstracts within PsycINFO, in which the complete, formal title of each personality disorder was used (e.g., "narcissistic personality disorder") along with two variations (i.e., "narcissistic personality" and "narcissistic"). Some of the conclusions of Skodol (2010) are supported. For example, there is much less literature on histrionic personality traits (albeit 790 hits were still obtained for the search term "histrionic") and a relative abundance of literature on the borderline and antisocial personality disorders. Nevertheless, this search also demonstrates that the literature base for narcissistic personality disorder is in fact much greater than it is for schizotypal, and clearly much greater than it is for the avoidant and obsessive-compulsive personality disorders no matter how the search is conducted. There is a considerable body of research documenting the association of narcissism with clinically relevant consequences such as aggression, self-enhancement, distorted self-presentation, failed relationships, cognitive biases, and internalizing and externalizing dysregulation

Table 1
Number of Papers for Each Personality Disorder

Name	Name + Personality disorder	Name + Personality	Name
Paranoid	97	239	7857
Schizoid	119	350	2142
Schizotypal	494	853	1626
Antisocial	1598	2371	9733
Borderline	4017	5069	11391
Histrionic	135	223	790
Narcissistic	430	1078	6612
Avoidant	299	434	3924
Dependent	147	323	7038
Obsessive-Compulsive	230	361	1870

Note. By “name” is meant the respective name of each personality disorder, such as “paranoid”. Search for “schizotypia” yielded 1 paper; “schizotypic” yielded 103; “psychopathy” = 2818; “psychopathic” = 3641; “narcissism” = 3745; “dependency” = 10087; “dependency” and “personality” entered separately = 1107; “dependent” and “personality” entered separately = 3506.

(Miller, Widiger, & Campbell, 2010; Ronningstam, 2005; Pincus & Lukowitsky, 2010). There is also a substantial body of empirical literature on dependency (Bornstein & Malka, 2009), likely much more than has been developed for the avoidant and obsessive-compulsive personality traits. The research on the relationship of dependency, stress, and depression is itself vast in magnitude and quality of design (Hammen, 2005).

The results for the search terms “paranoid,” “dependent,” and “obsessive-compulsive” should be qualified by the fact that a substantial proportion of these studies will concern Axis I disorders rather than the respective personality trait. In addition, it is likely that a number of the narcissistic, borderline, avoidant, and other personality disorder papers will not involve studies with strong methodologies. However, what is apparent is that a systematic, direct comparison among the personality disorders should be conducted to determine their relative clinical utility and validity. A decision as momentous as deleting five diagnoses should not be based on just a few papers that offer cursory support for the diagnoses that are retained. Such a decision should instead be informed by a thorough, systematic, fair, and balanced search of the clinical and research literature concerning all of the personality disorders, particularly the ones considered for deletion (Frances et al., 1989).

Abandonment of Diagnostic Criterion Sets for Prototype Matching

Prior to DSM-III (American Psychiatric Association, 1980), mental disorder diagnosis was notoriously unreliable, as it was based on clinicians providing their subjective judgments in matching what they knew about a patient (usually on the basis of unstructured, idiosyncratic assessments) to a narrative, paragraph description of a prototypic case. Clinicians were free to focus on any particular part of the narrative description when developing a diagnosis. No specific or explicit guidelines were provided as to which features were necessary or even how many to consider (Spitzer, Williams, & Skodol, 1980). Spitzer and Fleiss (1974) reviewed nine major studies of interrater diagnostic reliability. Kappa values for the diagnosis of a personality disorder ranged from a low of .11 to .56, with a mean of only .29. DSM-II (American Psychiatric Association, 1968) was blamed for much of this poor reliability, along with idiosyncratic clinical interviewing (Spitzer, Endicott, & Robins, 1975).

It is well accepted that the major innovation of DSM-III was the inclusion of specific and explicit criterion sets (Spitzer et al., 1980; Zimmerman, 1994). As expressed recently by Kendler, Munoz, and Murphy (2010), “The renewed interest in diagnostic reliability in the early 1970s—substantially influenced by the Feighner criteria—proved to be a critical corrective

and was instrumental in the renaissance of psychiatric research witnessed in the subsequent decades” (p. 141). One of the benefits of this renaissance was the highly published *Collaborative Longitudinal Studies of Personality Disorders* (CLPS), which, as its primary measure, used a semistructured interview that systematically assessed the DSM-IV personality disorders’ specific and explicit criterion sets (Skodol et al., 2005).

The DSM-5 work group, however, proposes to abandon specific and explicit criterion sets in favor of the method used for DSM-II (American Psychiatric Association, 1968). A perusal of the posted narratives reveals that there is also a shift away from behaviorally specific features toward more complex attributions (e.g., “dependency involves both insecure attachment, expressed as difficulty tolerating aloneness; intense fear of loss, abandonment, or rejection by significant others; and urgent need for contact with significant others when stressed or distressed, accompanied sometimes by highly submissive, subservient behavior;” Skodol [2010], “Borderline personality disorder type,” para. 3). Each narrative consists of 10–17, often complex, sentences with no rules or guidance as to how many of the features need to be present. There is even no requirement that each sentence be systematically assessed. According to Westen, Shedler, and Bradley (2006, 847), “To make a diagnosis, diagnosticians rate the overall similarity or ‘match’ between a patient and the prototype using a 5-point rating scale, considering the prototype as a whole rather than counting individual symptoms.” Rather than require a clinician to spend an hour or two carefully assessing each feature, with prototype matching, “clinicians could make a complete Axis II diagnosis in 1 or 2 minutes” (Westen et al., 2006, p. 855).

Shifting from specific and explicit criterion sets to prototype matching is a momentous change in how personality disorder diagnoses will be obtained. Such a change should be supported by a considerable body of consistent and compelling research to offset the many prior studies that have raised significant concerns regarding prototype matching (e.g., Spitzer et al., 1975; Spitzer & Fleiss, 1974; Spitzer et al., 1980). Studies in support of prototype matching are posted on the DSM-5 website. However, a close consideration of this research suggests that the support is, at best, questionable and, at worst, weak. Considered herein will be the re-

search concerning reliability, validity, and clinical utility.

Reliability

Skodol (2010) states that “prototype ratings have been demonstrated to have good interrater reliability” (“Dimensional representation of types,” para. 2). However, there are in fact no published findings on the interrater reliability of prototype matching. There is one published study (i.e., Westen & Muderrisoglu, 2003; not posted on the website) concerning the interrater reliability of the q-sort coding of the 200 items of the Shedler-Westen Assessment Procedure (SWAP) from which the DSM-5 prototypes were derived (the precise source for the work group narrative prototypes is not described, but they do appear to closely resemble the SWAP prototypes). Perhaps this is the interrater reliability study the work group refers to. Good to excellent reliability for descriptions in terms of the 200 SWAP items has been obtained. However, matching a patient to a narrative prototype is an entirely different task from rating a patient with respect to 200 items. The latter requires that each item be individually considered, assessed, and rated. This is much different than simply matching a patient to a global gestalt suggested by a subset of items that have been collectively considered. For example, the reliability of a 200-item profile is substantially facilitated by the inclusion of so many ratings (e.g., agreement on which 100 are absent will result in high reliability for the entire profile even if the scores on the remaining 100 items are randomly chosen; Block, 2008).

It has also been suggested that because the DSM-5 prototype narratives include sentences that have empirical support for their inclusion, DSM-5 prototype matching will have more reliability and/or validity than the DSM-II prototype matching. However, the validity of the sentence selection again has no bearing on the reliability of the prototype matching. In fact, the DSM-5 narratives are substantially longer and more complex than the narratives in DSM-II, providing much greater opportunity for inconsistency in how they will be interpreted and applied.

It is possible that the work group is aware of one or more unidentified, unpublished interrater reliability studies that do actually concern pro-

prototype matching. It is also possible that this study will be included within the field trial. Field trials were conducted for DSM-IV that attempted to address the primary, specific concerns that would be raised with respect to each particular proposal (Frances et al., 1989). What is clearly needed for DSM-5 is an empirical demonstration of the interrater reliability of prototype matching. The prototype matching field trial should include two different clinicians independently interviewing the same patient rather than having one clinician simply watch or listen to a tape. The major concern with prototype matching is that, given the absence of any requirements or rules with respect to what features need to be considered and how they should be integrated, clinicians (and researchers) will focus on different components of the narrative. This will not be tested if the second rater is explicitly guided by the first rater as to which sentences of the narrative were emphasized in the interview.

An interrater reliability study with independent interviews would be relatively expensive, but Skodol, Oldham, Rosnick, Kellman, and Hyler (1991) did conduct such a study when researching the similarity of findings provided by two different semistructured interviews (for half the sample, one semistructured interview was administered in the morning, while the other half was administered in the afternoon; the order was reversed for the other half). Hopefully, the work group will now conduct a comparable study before abandoning well-established diagnostic criterion sets in favor of unproven and clearly questionable prototype matching.

Validity

Published data concerning the validity of prototype matching are posted on the DSM-5 website (i.e., Shedler & Westen, 2004; Shea, Glass, Pilkonis, Watkins, & Docherty, 1987; Westen & Shedler, 1999a, 1999b; Westen et al., 2006). However, there is no acknowledgment on the website of the many concerns that have been raised with respect to this research (e.g., Block, 2008; Wood, Garb, Nezworski, & Koren, 2007; Widiger, 2007). A proposed revision should not only consider the research in support of that proposal, it should also acknowledge and ad-

dress the concerns that have been raised with respect to the proposal (Frances et al., 1989).

For example, in every instance, the validation data for prototype matching have been provided by the same persons who provided the prototype ratings. This is comparable to having the interviewers within a semistructured interview validation study provide the criterion diagnoses for the semistructured interview assessments. It is comparable to testing interrater reliability by asking the same clinician to provide both ratings. No such semistructured interview validity or reliability study has ever been published because it clearly would not provide a meaningful test of reliability or validity. It would be useful for the DSM-5 field trial to have the validators consist of ratings that are independent of (that is, blind to) the prototype rating.

The existing prototype matching research, at times, raises more concerns than it resolves. For example, Westen et al. (2006) compared, empirically, the extent of diagnostic co-occurrence obtained with prototype matching with the extent of diagnostic co-occurrence obtained if the same clinicians systematically considered each DSM-IV diagnostic criterion. They reported considerably less diagnostic co-occurrence with the prototype matching. However, rather than indicating a strength, these findings indicate a problem for prototype matching. The fact that diagnostic co-occurrence increased when the clinicians were encouraged to consider specific features of other personality disorders, through the provision of diagnostic criterion sets, suggests that the diagnostic co-occurrence was present but was not being recognized when clinicians were allowed to base their diagnoses on whatever feature or feature(s) they wished to consider.

The reliability and validity of prototype matching needs rigorous testing because it is evident that such a change is a fundamentally risky shift. No other DSM-5 work group is even considering such a shift. How will the personality disorders sections be perceived if this change occurs? Personality disorders have long been included in many Axis I studies, in part because personality disorders can have a significant impact on the etiology, course, and treatment of an Axis I disorder. How will this shift impact this future research? How, for instance, will a researcher in anxiety disorders, epidemi-

ology, or behavior genetics incorporate prototype matching into his or her study?

One of the most heavily published research programs in the field of personality disorders is provided by the findings obtained from CLPS (Skodol et al., 2005). Would the National Institute of Mental Health have even funded CLPS if they had proposed to use prototype matching to obtain their personality disorder diagnoses? In fact, how will personality disorder researchers use this approach in future DSM-5 studies?

It will be important for the DSM-5 field trial to provide guidance on how future researchers are expected to conduct prototype assessments, and to directly compare the validity (and reliability) of a prototype matching interview with a semistructured interview of the DSM-IV diagnostic criterion sets, each independently administered so that the results of one method do not influence the outcome of the other. Such a radical shift in how personality disorders will be clinically assessed and diagnosed warrants at least one such study.

Clinical Utility

Clinicians do prefer prototype matching over diagnostic criterion sets (Rottman, Ahn, Sanislow, & Kim, 2009; Spitzer, First, Shedler, Westen, & Skodol, 2008). Criterion sets are difficult for clinicians to use, probably because of the amount of time it can take to assess them (Mullins-Sweatt & Widiger, 2009). This was evident from the very beginning of specific and explicit criterion sets in the study by Mellsop, Varghese, Joshua, and Hicks (1982), which reported poor interrater reliability using DSM-III, due in large part to idiosyncratic interviewing and clinical preconceptions. The problems that occur with the failure to conduct systematic assessments of diagnostic criterion sets in general clinical practice have been replicated numerous times (Blashfield & Flanagan, 1998; Garb, 2005; Nazikian, Rudd, Edwards, & Jackson, 1990; Zimmerman & Mattia, 1999). However, the solution is not to pretend that how personality disorders are being diagnosed in general clinical practice is not a problem and to just shift to a method that clinicians find easier to use. The official diagnostic manual should help to improve the reliability and validity of clinicians' diagnoses.

It might be useful for the work group to consider other ways of addressing the difficulties that clinicians have with diagnostic criterion sets. For example, if clinicians are focusing on just a subset of criteria when deciding on a clinical diagnosis (rather than systematically assessing all of them), it might be useful to inform them as to which diagnostic criteria are most informative (Mullins-Sweatt & Widiger, 2009). It is evident that all of the diagnostic criteria need not be assessed, and some diagnostic criteria are considerably more informative than others (Chorpita & Nakamura, 2008; Frick et al., 1994; Widiger et al., 1984). If clinicians do not have the time or means to consider all of them, they should be provided with empirically validated information as to which criteria are especially diagnostic. This would help them provide more reliable and valid diagnoses in an efficient, economical fashion.

Dimensional Model

The personality disorder field is appropriately shifting toward a dimensional classification of personality disorder (Clark, 2007; Widiger & Trull, 2007). One of the DSM-5 research planning conferences was devoted to providing the empirical support for, and developing, a dimensional classification of personality disorder (i.e., Widiger, Simonsen, Krueger, Livesley, & Verheul, 2005). A purpose of that conference was to work toward finding a common ground among the alternative proposals (Widiger & Simonsen, 2005). More specifically, Widiger and Simonsen (2005) proposed a four-dimensional model, consisting of extraversion versus introversion, antagonism versus compliance, constraint versus impulsivity, and emotional dysregulation versus emotional stability. They suggested that a fifth broad domain, unconventionality versus closed to experience, would also be necessary to fully account for all of the maladaptive trait scales included within the alternative dimensional models. This domain of personality functioning was not included within the integrative model because it is not included within some of the predominant models, such as Livesley's (2007) four-dimensional model, assessed by the Dimensional Assessment of Personality Pathology (DAPP), or Clark's (1993) three-factor model, assessed by the Schedule for Nonadaptive and Adaptive Personality (SNAP).

Unconventionality versus closedness to experience, though, is included within the five-factor model (FFM; Widiger & Trull, 2007).

Rather than work toward finding a common ground among existing models, the DSM-5 work group instead chose to construct their own new, unique dimensional model (Krueger, 2010). Thirty-seven traits are nominated and organized within a six-domain model. Rather than indicate how this new model integrates well with the existing alternative models, Clark and Krueger (2010) instead focus on how it is inconsistent with one particular model, the FFM. The proposed model for DSM-5 will be considered with respect to three concerns: the distinctions that are made with respect to the FFM, the lack of bipolarity in the personality structure, and the absence of normal personality traits.

Five-Factor Model

The emphasis by Clark and Krueger (2010) on how their proposal is particularly different from the FFM is difficult to understand, as they had previously suggested that the most compelling model for the integration of personality and personality disorder was, in fact, the FFM. Markon, Krueger, and Watson (2005) conducted a widely cited exploratory and meta-analytic hierarchical factor analyses of numerous measures of normal and abnormal personality functioning. The results yielded consistently a five-factor solution that they indicated “strongly resembles the Big Five factor structure commonly described in the literature” (p. 144). Their analyses did not support an additional sixth factor. Clark (2007) stated in her *Annual Review of Psychology* paper that “the five-factor model of personality is widely accepted as representing the higher-order structure of both normal and abnormal personality traits” (p. 246).

Clark and Krueger (2010) claim two major distinctions from the FFM. They state that their compulsivity dimension does not align with FFM conscientiousness and that their schizotypy dimension does not align with FFM openness. Their suggestion that compulsivity is not aligned with FFM conscientiousness is especially surprising, given that all of their own previous research clearly indicated otherwise, and all of the citations they provide on the website also indicate an alignment of compul-

sivity with conscientiousness. In Clark, Vorhies, and McEwen (2002), NEO Personality Inventory-Revised (NEO PI-R; Costa & McCrae, 1992), conscientiousness and SNAP workaholism loaded positively on the same factor. In Clark, Livesley, and Schroeder (1996), DAPP compulsivity, SNAP workaholism, and SNAP propriety loaded on the same factor, which they indicated “can be identified with conscientiousness” (p. 297). In Markon et al. (2005), SNAP propriety, SNAP workaholism, and NEO PI-R conscientiousness loaded on the same factor in their new data factor analysis, and, in their meta-analytic factor analysis, DAPP compulsivity and NEO PI-R conscientiousness loaded on the same factor. In both cases, they indicated this factor was equivalent to FFM conscientiousness. Schroeder, Wormworth, and Livesley (1992) reported that FFM conscientiousness and DAPP compulsivity loaded strongly on the same factor (.94 and .72, respectively). In reviewing their models together, Clark and Livesley (2002) concluded that “compulsivity (conventionality-rigidity) undoubtedly tapped conscientiousness” (p. 167). In their earlier draft proposal for DSM-5, Krueger et al. (2008) included facet scales of “orderliness” and “conscientiousness” within the domain of compulsivity.

Clark and Krueger (2010) cite the meta-analyses of Saulsman and Page (2004) and O’Connor (2005) as support for their statement that compulsivity does not align with FFM conscientiousness, but this is not the conclusion reached in either of these two studies. O’Connor (2005), for example, concluded that obsessive-compulsive personality disorder symptomatology aligns well with conscientiousness (obtaining a loading of .72 on the respective factor), replicating two earlier meta-analytic studies by O’Connor (i.e., O’Connor, 2002; O’Connor & Dyce, 1998). Clark and Krueger (2010) do not acknowledge the more recent meta-analysis by Samuel and Widiger (2008), which reported that “a predominant finding of the studies included within this meta-analysis was a positive correlation of FFM conscientiousness facets with obsessive-compulsive personality disorder” (p. 12).

The alignment of the cognitive-perceptual aberrations of schizotypia with FFM openness has less consistent support, but there is still quite a bit of support, none of which is acknowl-

edged by Clark and Krueger (2010). Their dismissal of the relationship with openness is consistent with the meta-analyses of Saulsman and Page (2004) and O'Connor (2005), but they again neglect the subsequent meta-analysis of Samuel and Widiger (2008), who indicated that the relationship is inconsistently confirmed when the FFM is assessed with the NEO PI-R but is confirmed when using a structured interview.

The NEO PI-R (Costa & McCrae, 1992) is the predominant measure of FFM openness, but it is not the only one. Tellegen includes a scale titled "Unconventionality" within his Big Seven model of personality (FFM plus the dimensions of positive and negative evaluation; Tellegen & Waller, 1987). Tellegen explicitly aligns unconventionality with FFM openness (Tellegen & Waller, 1987), empirical support for which is provided by McCrae and Costa (1995), Tellegen and Waller (1987), and Durrett and Trull (2005); only weak support, though, is provided by Simms (2007). Unconventionality includes items assessing normal openness, such as curious, imaginative, and creative, as well as abnormal variants, such as being odd, peculiar, strange, and having wild ideas. Lee and Ashton (2004) more recently developed the HEXACO-Personality Inventory, which includes an openness to experience domain, a facet scale of which is, again, unconventionality, assessing the tendency to be odd, strange, unusual, eccentric, weird, aberrant, and peculiar. Piedmont et al. (2009) developed scales to assess maladaptive variants of high and low openness. Their "Odd and Eccentric" scale correlated specifically with schizotypal personality disorder and a measure of paranormal beliefs. Haigler and Widiger (2001) demonstrated empirically that if NEO PI-R openness items were experimentally manipulated to assess maladaptive variants of the same content, correlations with measures of schizotypal personality disorder emerge. None of this literature is acknowledged by Clark and Krueger (2010).

Clark and Krueger (2010) instead cite just two specific studies (i.e., Tackett, Silberschmidt, Krueger, & Sponheim, 2008, and Watson et al., 2008) that they state support the separation of schizotypy from FFM openness. However, Tackett et al. (2008) only indicated that the cognitive-perceptual aberrations of schizotypy are separate from the first four do-

main of the FFM (i.e., emotional instability, antagonism, introversion, and conscientiousness). They did not test the relationship with openness (which was not assessed), and they even explicitly acknowledged that their findings were consistent with cognitive-perceptual aberrations being maladaptive variants of FFM openness.

Watson et al. (2008) did report a separation of adaptive openness from maladaptive peculiarity, but it was through a data collection that so heavily loaded these two constructs that a factor analysis would be compelled to separate them. Clark and Krueger (2010) do not acknowledge the existence of numerous other factor analytic studies in which cognitive-perceptual aberrations and/or schizotypal symptoms load on FFM openness (e.g., Camisa et al., 2005; Kwapil, Barrantes-Vidas, & Silvia, 2008; Wiggins & Pincus, 1989).

In sum, the research has consistently supported an alignment of FFM conscientiousness with compulsivity, and there is a considerable body of research to support the association of FFM openness with cognitive-perceptual aberrations. This research would readily support an integration of the FFM with the dimensional model proposed by Clark and Krueger (2010). However, the work group prefers to distinguish their model from the FFM rather than attempt to indicate how a common ground among alternative models can be achieved.

There are, however, two features of the proposed dimensional model that does distinguish it from the integrated model of Widiger and Simonsen (2005) and the FFM: the lack of bipolarity and the absence of normal personality traits. Each of these will be discussed in turn.

Bipolarity

The FFM has bipolar dimensions in which there are maladaptive variants at both ends of each pole. For example, for FFM conscientiousness, there is perfectionism, perseveration, rigidity, and orderliness (compulsivity) at the high end, and distractibility, recklessness, and irresponsibility (disinhibition) at the low end. In the FFM, compulsivity and disinhibition are not conceptualized as separate domains but rather as opposite to one another.

This bipolarity is rejected by Clark and Krueger (2010) in their separation of the do-

mains of compulsivity and disinhibition, yet it is evident in virtually all prior factor analytic studies by Drs. Clark and Krueger. In Clark et al. (1996), SNAP impulsivity, SNAP disinhibition, and DAPP-BQ stimulus-seeking loaded positively, whereas DAPP compulsivity, SNAP workaholism, and SNAP propriety loaded negatively on the same factor. In Clark et al. (2002), NEO PI-R conscientiousness and SNAP workaholism loaded positively on one factor, whereas SNAP impulsivity loaded negatively. In Markon et al. (2005), SNAP propriety and workaholism loaded at one pole (along with NEO PI-R conscientiousness), whereas SNAP impulsivity and disinhibition loaded negatively. This bipolarity is also found in most every study posted on the website that provided a structural model of personality disorder (e.g., Markon et al., 2005; O'Connor, 2002, 2005; Saulsman & Page, 2004; Watson et al., 2008; Widiger & Simonsen, 2005).

The reluctance to acknowledge the existence of the bipolarity of personality structure contributes to a number of problems for the work group's proposal, including the failure to include some important traits and the misplacement of others. For example, because the model does not include maladaptively low neuroticism (low negative emotionality), they are unable to acknowledge the existence of psychopathic fearlessness and glib charm (Lynam & Widiger, 2007). Because their model does not include maladaptive agreeableness, there is no ability to recognize the self-denigration, gullibility, and self-sacrifice of the dependent (Lowe, Edmundson, & Widiger, 2009).

The absence of bipolarity also results in obvious misplacements. For example, submissiveness is clearly a manner of interpersonal relatedness that is associated with agreeableness (Lowe et al., 2009), but in the absence of acknowledging any maladaptive agreeableness, it was placed within negative affectivity. "Histrionism," which is defined as behaving in a manner to attract attention, flamboyance, admiration seeking, and sexualization of interpersonal relations, is classified as a facet of antagonism. The traits of histrionic personality disorder have been consistently classified as maladaptive variants of extraversion (O'Connor, 2005; Samuel & Widiger, 2008; Saulsman & Page, 2004), and clinicians (and researchers) have viewed prototypic cases of HPD as involving high extraversion

but not antagonism (Lynam & Widiger, 2001; Samuel & Widiger, 2004), but the Clark and Krueger (2010) model cannot recognize the contribution of extraversion to histrionism because it does not recognize maladaptive extraversion.

Normal Personality Traits

The formal title of the work group is the Personality and Personality Disorders Work Group, its goal ostensibly to provide an integration of normal personality and personality disorder. However, the proposed model does not actually include any recognition of normal personality functioning. All of the trait scales refer to abnormal personality functioning, as do the six domains. Low compulsivity does not imply conscientiousness, nor does low schizotypy imply openness. The proposed model has no normal variants for compulsivity or schizotypy because to do so would have required acknowledgment of the relationship of conscientiousness to compulsivity and openness to schizotypy.

Similarly, low scores on antagonism, emotional dysregulation, and introversion do not imply the presence of normal personality traits. They instead imply only lower levels of the respective maladaptive personality traits. Low antagonism does not imply agreeableness, nor does low introversion imply extraversion. The proposed model has no normal variants for antagonism or introversion because to do so would have required acknowledgment of the bipolarity of personality structure, and acknowledgment that opposite to antagonism is agreeableness and opposite to introversion is extraversion.

Krueger and Eaton (2010) extol the value of having a dimensional model of both personality and personality disorder. To illustrate, they described a patient with borderline personality disorder whose high openness and extraversion had useful treatment implications. For example, "the high openness might also suggest that this person would be open to a therapeutic approach where depth and underlying motives for behavior are explored" (p. 102) (see Widiger & Lowe [2007] for a similar discussion). However, this useful information cannot be provided by the Clark and Krueger (2010) proposed model because it explicitly excludes openness and there is no assessment of extraversion. In the end,

there is no ability of the model to describe normal, adaptive personality traits, missing an excellent opportunity to provide a truly integrative model of normal and abnormal personality functioning (Widiger & Trull, 2007).

Conclusions

The proposals posted by the work group are radical, to say the least, including the deletion of half of the diagnoses, the removal of diagnostic criterion sets for prototype matching, and the provision of a newly developed dimensional model that will not actually have any official recognition within a patient's medical record. One would hope that proposals as severe as these would have been guided by objective (fair and balanced), systematic, and thorough reviews of the empirical literature (Frances et al., 1989; Widiger & Clark, 2000). However, based on the material posted on the DSM-5 website, this does not appear to have been the case. The literature reviews consist of a few carefully selected, self-serving citations. A considerable body of research that is inconsistent with the various proposals is not even acknowledged, let alone addressed. Some statements are simply wrong.

The work group's proposals will gut and cripple personality disorder diagnosis. The gutting is the deletion of fully half its coverage, with no official recognition provided to its dimensional replacement. The work group is well into the process of dismantling the home for maladaptive personality functioning without actually having secured a new residence. The crippling is the shift to a method of diagnosis that has long been recognized as unreliable. These changes are so severe that the future of personality disorders is, at best, shaky.

At the first meeting of the DSM-5 Research Planning Conference, chaired by Drs. Darrel Regier and Steve Hyman, it was suggested that personality disorders be deleted from the diagnostic manual entirely and converted into early-onset, chronic variants of various Axis I disorders (e.g., avoidant personality disorder would be replaced by generalized social phobia). Dr. Bruce Cuthbert was provided the responsibility for describing this proposal, the results of which were contained within First et al. (2002). The five personality types being retained for DSM-5 are those that are the relatively easiest to con-

vert to an early-onset, chronic variant of an existing Axis I disorder (narcissistic, histrionic, and dependent appear to be impossible to convert to an Axis I disorder). Perhaps when the inordinate complexity, weak coverage, unreliability, and, as a result, invalidity of DSM-5 personality disorder diagnosis becomes so clearly apparent, it may appear best to some to just abandon the section altogether and fold the remaining five types into Axis I disorders, as suggested at the first DSM-5 Research Planning Conference. The dimensional model could stay on Axis II, as an optional axis (no official coding) for clinicians and researchers who might be interested, much like the status (and weak usage) of the current axes III, IV, and V. Perhaps this is being overly pessimistic about the future of the field of personality disorder, but with the official proposals for DSM-5, it is difficult being optimistic.

References

- American Psychiatric Association. (1968). *Diagnostic and statistical manual of mental disorders* (2nd ed.). Washington, DC: Author.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- Blashfield, R. K., & Flanagan, E. (1998). A prototypic nonprototype of a personality disorder. *Journal of Nervous and Mental Disease*, 186, 244–246.
- Blashfield, R. K., & Intoccia, V. (2000). Growth of the literature on the topic of personality disorders. *American Journal of Psychiatry*, 157, 472–473.
- Block, J. (2008). *The Q-sort in character appraisal: Encoding subjective impressions of persons quantitatively*. Washington, DC: American Psychological Association.
- Bornstein, R. F., & Malka, I. L. (2009). Dependent and histrionic personality disorders. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (2nd ed., pp. 602–621). New York, NY: Oxford University Press.
- Camisa, K. M., Bockbrader, M. A., Lysaker, P., Rae, L. L., Brenner, C. A., & O'Donnell, B. F. (2005). Personality traits in schizophrenia and related personality disorders. *Psychiatry Research*, 133, 23–33.
- Chorpita, B. F., & Nakamura, B. J. (2008). Dynamic structure in diagnostic structured interviewing: A comparative test of accuracy and efficiency. *Journal of Psychopathology and Behavioral Assessment*, 30, 52–60.

- Clark, L. A. (1993). *Manual for the Schedule for Nonadaptive and Adaptive Personality (SNAP)*. Minneapolis, MN: University of Minnesota Press.
- Clark, L. A. (2007). Assessment and diagnosis of personality disorder: Perennial issues and an emerging reconceptualization. *Annual Review of Psychology*, *57*, 227–257.
- Clark, L. A., & Krueger, R. F. (2010, February 10). *Rationale for a six-domain trait dimensional diagnostic system for personality disorder*. Retrieved from <http://www.dsm5.org/ProposedRevisions/Pages/RationaleforaSix-DomainTraitDimensionalDiagnosticSystemforPersonalityDisorder.aspx>
- Clark, L. A., & Livesley, W. J. (2002). Two approaches to identifying the dimensions of personality disorder: Convergence on the five-factor model. In P. T. Costa & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 161–176). Washington, DC: American Psychological Association.
- Clark, L. A., Livesley, W. J., Schroeder, M. L., & Irish, S. L. (1996). Convergence of two systems for assessing personality disorder. *Psychological Assessment*, *8*, 294–303.
- Clark, L. A., Vorhies, L., & McEwen, J. L. (2002). Personality disorder symptomatology from the five-factor perspective. In P. T. Costa & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 125–160). Washington, DC: American Psychological Association.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Durrett, C., & Trull, T. (2005). An evaluation of evaluative personality terms: A comparison of the Big Seven and five-factor model in predicting psychopathology. *Psychological Assessment*, *17*, 359–368.
- First, M. B. (2005). Clinical utility: A prerequisite for the adoption of a dimensional approach in DSM. *Journal of Abnormal Psychology*, *114*, 560–564.
- First, M. B., Bell, C. B., Cuthbert, B., Krystal, J. H., Malison, R., Offord, D. R., . . . Wisner, K. L. (2002). Personality disorders and relational disorders: A research agenda for addressing crucial gaps in DSM. In D. J. Kupfer, M. B. First, & D. A. Regier (Eds.), *A research agenda for DSM-V* (pp. 123–199). Washington, DC: American Psychiatric Association.
- Frances, A. J. (2009). A warning sign on the road to DSM-V: Beware of its unintended consequences. *Psychiatric Times*, *26*, 1–4.
- Frances, A. J., Widiger, T. A., & Pincus, H. A. (1989). The development of DSM-IV. *Archives of General Psychiatry*, *46*, 373–375.
- Frick, P. J., Lahey, B. B., Applegate, B., Kerdyck, L., Ollendick, T., Hynd, G. W., . . . Waldman, I. (1994). DSM-IV field trials for the disruptive behavior disorders: Symptom utility estimates. *Journal of the American Academy of Child and Adolescent Psychiatry*, *33*, 529–539.
- Garb, H. (2005). Clinical judgment and decision making. *Annual Review of Clinical Psychology*, *1*, 67–89.
- Haigler, E. D., & Widiger, T. A. (2001). Experimental manipulation of NEO PI-R items. *Journal of Personality Assessment*, *77*, 339–358.
- Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology*, *1*, 293–319.
- Kendler, K. S., Kupfer, D., Narrow, W., Phillips, K., & Fawcett, J. (2009). *Guidelines for making changes to DSM-V*. Retrieved from http://www.psych.org/MainMenu/Research/DSMIV/DSMV/DSMRevisionActivities/Guidelines-for-Making-Changes-to-DSM_1.aspx
- Kendler, K., Munoz, R. A., & Murphy, G. (2010). The development of the Feighner criteria: A historical perspective. *American Journal of Psychiatry*, *167*, 134–142.
- Krueger, R. F. (2010, March). Personality traits: Prospects for DSM-V. In C. J. Hopwood (Chair), *Personality assessment in context of DSM-V*. Symposium conducted at the annual meeting of the Society for Personality Assessment, San Jose, CA.
- Krueger, R. F., & Eaton, N. R. (2010). Personality traits and the classification of mental disorders: Toward a complete integration in DSM-V and an empirical model of psychopathology. *Personality Disorders: Theory, Research, and Treatment*, *1*, 97–118.
- Krueger, R. F., Skodol, A. E., Livesley, W. J., Shrout, P. E., & Huang, Y. (2008). Synthesizing dimensional and categorical approaches to personality disorders: refining the research agenda for DSM-IV Axis II. In J. E. Helzer, H. C. Kraemer, R. F. Krueger, H. U. Wittchen, P. J. Sirovatka, & D. A. Regier (Eds.), *Dimensional approaches to diagnostic classification. Refining the research agenda for DSM-V* (pp. 85–100). Washington, DC: American Psychiatric Association.
- Kwapil, T. R., Barrantes-Vidal, N., & Silvia, P. J. (2008). The dimensional structure of the Wisconsin Schizotypy Scales: Factor identification and construct validity. *Schizophrenia Bulletin*, *34*, 444–457.
- Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO Personality Inventory. *Multivariate Behavioral Research*, *39*, 329–358.
- Livesley, W. J. (2007). A framework for integrating dimensional and categorical classification of personality disorder. *Journal of Personality Disorders*, *21*, 199–224.

- Lowe, J. R., Edmundson, M., & Widiger, T. A. (2009). Assessment of dependency, agreeableness, and their relationship. *Psychological Assessment, 21*, 543–553.
- Lynam, D. R., & Widiger, T. A. (2001). Using the five-factor model to represent the DSM-IV personality disorders: An expert consensus approach. *Journal of Abnormal Psychology, 110*, 401–412.
- Lynam, D. R., & Widiger, T. A. (2007). Using a general model of personality to identify the basic elements of psychopathy. *Journal of Personality Disorders, 21*, 160–178.
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology, 88*, 139–157.
- McCrae, R. R., & Costa, P. T. (1995). Positive and negative valence within the five-factor model. *Journal of Research in Personality, 29*, 443–460.
- Mellsop, G., Varghese, F., Joshua, S., & Hicks, A. (1982). Reliability of Axis II of DSM-III. *American Journal of Psychiatry, 139*, 1360–1361.
- Miller, J. D., Widiger, T. A., & Campbell, W. K. (2010). Narcissistic personality disorder and the DSM-V. *Journal of Abnormal Psychology, 119*, 640–649.
- Mullins-Sweatt, S. N., & Widiger, T. A. (2009). Clinical utility and DSM-V. *Psychological Assessment, 21*, 302–312.
- Nazikian, H., Rudd, R. P., Edwards, J., & Jackson, H. J. (1990). Personality disorder assessments for psychiatric inpatients. *Australian and New Zealand Journal of Psychiatry, 24*, 37–46.
- O'Connor, B. P. (2002). A quantitative review of the comprehensiveness of the five-factor model in relation to popular personality inventories. *Assessment, 9*, 188–203.
- O'Connor, B. P. (2005). A search for consensus on the dimensional structure of personality disorders. *Journal of Clinical Psychology, 61*, 323–345.
- O'Connor, B. P., & Dyce, J. A. (1998). A test of models of personality disorder configuration. *Journal of Abnormal Psychology, 107*, 3–16.
- Piedmont, R. L., Sherman, M. F., Sherman, N. C., Dy-Liacco, G. S., & Williams, J. E. (2009). Using the five-factor model to identify a new personality disorder domain: The case for experiential permeability. *Journal of Personality and Social Psychology, 96*, 1245–1258.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology, 6*, 421–446.
- Ronningstam, E. (2005). Narcissistic personality disorder. In M. Maj, J. E. Mezzich, H. S. Akiskal, & A. Okasha (Eds.), *Personality disorders* (pp. 277–327). New York, NY: Wiley.
- Rottman, B. M., Ahn, W. K., Sanislow, C. A., & Kim, N. S. (2009). Can clinicians recognize DSM-IV personality disorders from five-factor model descriptions of patient cases? *American Journal of Psychiatry, 166*, 427–433.
- Samuel, D. B., & Widiger, T. A. (2004). Clinicians' personality descriptions of prototypic personality disorders. *Journal of Personality Disorders, 18*, 286–308.
- Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical Psychology Review, 28*, 1326–1342.
- Saulsman, L. M., & Page, A. C. (2004). The five-factor model and personality disorder empirical literature: A meta-analytic review. *Clinical Psychology Review, 23*, 1055–1085.
- Schroeder, M. L., Wormworth, J. A., & Livesley, W. J. (1992). Dimensions of personality disorder and their relationship to the Big Five dimensions of personality. *Psychological Assessment, 4*, 47–53.
- Shea, M. T., Glass, D. R., Pilkonis, P. A., Watkins, J., & Docherty, J. P. (1987). Frequency and implications of personality disorders in a sample of depressed outpatients. *Journal of Personality Disorders, 1*, 27–42.
- Shedler, J., & Westen, D. (2004). Refining personality disorder diagnosis: Integrating science and practice. *American Journal of Psychiatry, 161*, 1350–1365.
- Simms, L. (2007). The Big Seven model of personality and its relevance to personality pathology. *Journal of Personality, 75*, 65–94.
- Skodol, A. (2010). *Rationale for proposing five specific personality types*. Retrieved from <http://www.dsm5.org/ProposedRevisions/Pages/RationaleforProposingFiveSpecificPersonalityDisorderTypes.aspx>
- Skodol, A. E., Gunderson, J. G., Shea, M. T., McGlashan, T. H., Morey, L. C., Sanislow, C. A., . . . Stout, R. L. (2005). The Collaborative Longitudinal Personality Disorders Study (CLPS): Overview and implications. *Journal of Personality Disorders, 19*, 487–504.
- Skodol, A. E., Oldham, J. M., Rosnick, L., Kellman, H. D., & Hyler, S. E. (1991). Diagnosis of DSM-III-R personality disorders: A comparison of two structured interviews. *International Journal of Methods in Psychiatric Research, 1*, 13–26.
- Spitzer, R. L., Endicott, J., & Robins, E. (1975). Clinical criteria for psychiatric diagnosis and DSM-III. *American Journal of Psychiatry, 132*, 1187–1192.
- Spitzer, R. L., First, M. B., Shedler, J., Westen, D., & Skodol, A. E. (2008). Clinical utility of five dimensional systems for personality diagnosis: A

- “consumer preference” study. *Journal of Nervous and Mental Disease*, 196, 356–374.
- Spitzer, R. L., & Fleiss, J. L. (1974). A re-analysis of the reliability of psychiatric diagnosis. *British Journal of Psychiatry*, 125, 341–347.
- Spitzer, R. L., Williams, J. B. W., & Skodol, A. E. (1980). DSM-III: The major achievements and an overview. *American Journal of Psychiatry*, 137, 151–164.
- Tackett, J. L., Silberschmidt, A. L., Krueger, R. F., & Sponheim, S. R. (2008). A dimensional model of personality disorder: Incorporating DSM Cluster A characteristics. *Journal of Abnormal Psychology*, 117, 454–459.
- Tellegen, A., & Waller, N. G. (1987, August). *Re-examining basic dimensions of natural language trait descriptors*. Paper presented at the 95th Annual Convention of the American Psychological Association, New York, NY.
- Verheul, R., & Widiger, T. A. (2004). A meta-analysis of the prevalence and usage of the personality disorder not otherwise specified (PDNOS) diagnosis. *Journal of Personality Disorders*, 18, 309–319.
- Watson, D., Clark, L. A., & Chmielewski, M. (2008). Structures of personality and their relevant to psychopathology: II. Further articulation of a comprehensive unified trait structure. *Journal of Personality*, 76, 1485–1522.
- Westen, D., & Muderrisoglu, S. (2003). Assessing personality disorders using a systematic clinical interview: Evaluation of an alternative to structured interviews. *Journal of Personality Disorders*, 17, 351–369.
- Westen, D., & Shedler, J. (1999a). Revising and assessing Axis II, Part I: Developing a clinically and empirically valid assessment method. *American Journal of Psychiatry*, 156, 258–272.
- Westen, D., & Shedler, J. (1999b). Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry*, 156, 273–285.
- Westen, D., Shedler, J., & Bradley, R. (2006). A prototype approach to personality disorder diagnosis. *American Journal of Psychiatry*, 163, 846–856.
- Widiger, T. A. (2007). Alternatives to DSM-IV Axis II. In W. O’Donohue, K. A. Fowler, & S. O. Lilienfeld (Eds.), *Personality Disorders. Toward the DSM-V* (pp. 21–40). Los Angeles, CA: Sage.
- Widiger, T. A., & Clark, L. A. (2000). Toward DSM-V and the classification of psychopathology. *Psychological Bulletin*, 126, 946–963.
- Widiger, T. A., Hurt, S., Frances, A., Clarkin, J., & Gilmore, M. (1984). Diagnostic efficiency and DSM-III. *Archives of General Psychiatry*, 41, 1005–1012.
- Widiger, T. A., & Lowe, J. (2007). Five-factor model assessment of personality disorder. *Journal of Personality Assessment*, 89, 16–29.
- Widiger, T. A., & Mullins-Sweatt, S. N. (2009). Five-factor model of personality disorder: A proposal for DSM-V. *Annual Review of Clinical Psychology*, 5, 115–138.
- Widiger, T. A., & Simonsen, E. (2005). Alternative dimensional models of personality disorder: Finding a common ground. *Journal of Personality Disorders*, 19, 110–130.
- Widiger, T. A., Simonsen, E., Krueger, R., Livesley, J., & Verheul, R. (2005). Personality disorder research agenda for the DSM-V. *Journal of Personality Disorders*, 19, 317–340.
- Widiger, T. A., & Trull, T. J. (2007). Plate tectonics in the classification of personality disorder: Shifting to a dimensional model. *American Psychologist*, 62, 71–83.
- Wiggins, J. S., & Pincus, H. A. (1989). Conceptions of personality disorder and dimensions of personality. *Psychological Assessment*, 1, 305–316.
- Wood, J. M., Garb, H. N., Nezworski, M. T., & Koren, D. (2007). The Shedler-Westen Assessment Procedure-200 as a basis for modifying DSM personality disorder categories. *Journal of Abnormal Psychology*, 116, 823–836.
- Zimmerman, M. (1994). Diagnosing personality disorders. A review of issues and research methods. *Archives of General Psychiatry*, 51, 225–245.
- Zimmerman, M., & Mattia, J. I. (1999). Psychiatric diagnosis in clinical practice: Is comorbidity being missed? *Comprehensive Psychiatry*, 40, 182–191.