

- Garb, H. N. (1998). *Studying the clinician: Judgment research and psychological assessment*. Washington, DC: American Psychological Association.
- Garb, H. N. (2005). Clinical judgment and decision making. *Annual Review of Clinical Psychology, 1*, 67–89.
- Kihlstrom, J. F. (1999). The psychological unconscious. In L. R. Pervin & O. John (Eds.), *Handbook of personality* (2nd ed., pp. 424–442). New York: Guilford Press.
- Kim, N. S., & Ahn, W. (2002). Clinical psychologists' theory-based representations of mental disorders predict their diagnostic reasoning and memory. *Journal of Experimental Psychology: General, 131*, 451–476.
- Pottick, K. J., Kirk, S. A., Hsieh, D. K., & Tian, X. (2007). Judging mental disorder in youths: Effects of client, clinician, and contextual differences. *Journal of Consulting and Clinical Psychology, 75*, 1–8.
- Widiger, T. A., Costa, P. T., & McCrae, R. R. (2002). A proposal for Axis II: Diagnosing personality disorders using the five factor model. In P. T. Costa & T. A. Widiger (Eds.), *Personality disorders and the five factor model of personality* (2nd ed., pp. 431–456). Washington, DC: American Psychological Association.
- 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.

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DOI:10.1037/0003-066X.63.1.61

## Important Questions Remain to Be Addressed Before Adopting a Dimensional Classification of Mental Disorders

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Widiger and Trull (February–March 2007) raised important nosological issues that warrant serious consideration not only for the personality disorders but for all mental disorders as the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* is revised during the next few years. As argued compellingly by these authors, dimensional classification may indeed offer substantial improvement over the present categorical system. Several questions remain to be addressed in evaluating whether this is the case and, if so, how dimensional classification can be implemented to best serve the disparate users of the *DSM*.

Adopting a conceptualization of personality disorders as continuous with normal personality traits would represent a step forward only if these disorders really are dimensional in nature. Despite strong historical preferences for dimensional models by psychologists and for categorical models by psychiatrists, research into whether mental disorders represent discrete clinical entities has only recently begun in earnest. Results emerging from this research suggest that some disorders may best be understood as categories, whereas others are better conceived as dimensions (see Ruscio, Haslam, & Ruscio, 2006, for a review). Such results underscore the importance of determining empirically the most valid representation for each disorder (Meehl, 1986; Ruscio & Ruscio, 2004). They also hint that an all-categorical or all-dimensional classification may ultimately prove to be less valid than one incorporating both categorical and dimensional elements.

For disorders that are truly dimensional, several questions will need to be considered to ensure that dimensional classification will be workable in practice:

**Feasibility.** Can the proposed system be implemented by practitioners in the limited time available for assessment and diagnosis? Clinicians do not routinely assess all symptoms of the 10 *DSM-IV* personality disorders. More often, they assess the (far smaller) subset of symptoms for disorders that seem likely given the clinical picture. Consequently, clinician-administered personality measures and lengthy patient questionnaires may add significantly to current assessment burden. This may limit feasibility for some clinicians as well as acceptability for some clients, who may not see these assessments as relevant to the problems that brought them in for treatment. Evaluation of feasibility will be crucial to ensure that any increase in assessment burden does not have the unintended consequence of reducing attention to personality pathology.

**Reliability.** Can the system be applied reliably by users? An extensive literature suggests that human judges can simultaneously combine and weigh about a half-dozen variables reliably and validly (Cooksey, 1996). The task is even more challenging when the variables are correlated or must be combined in complex ways. It is noteworthy that all of the dimensional models described by Widiger and Trull (2007) include many more variables than this. In developing a dimensional classification, it seems important to consider known limits of human cognitive

capacity in addition to content coverage. This includes showing that the multifactorial profiles can be interpreted consistently by diagnosticians as well as considering ways of minimizing the number of elements that must be combined (as in the two- and three-point codes of the Minnesota Multiphasic Personality Inventory—2; Graham, 2000).

**Communication.** Does the system facilitate effective, efficient communication—not only with clients, but with other treatment providers, administrators, insurance companies, and policymakers? For all their shortcomings, categorical diagnostic labels (e.g., borderline personality disorder) efficiently convey a great deal of information and simplify record keeping. These shorthand labels are undoubtedly imprecise, especially for disorders with substantial intracategory heterogeneity. Nevertheless, they offer advantages that a more precise—but more cumbersome—system may have difficulty replicating. An important challenge for any dimensional system will be to balance precision with efficiency in communication.

**Thresholds.** Does the system incorporate defensible diagnostic thresholds? Widiger and Trull (2007) called persuasively for a thoughtful reevaluation of current thresholds. Establishing well-justified, empirically based disorder thresholds is an important priority whether the goal is to set the boundaries of discrete disorders or to locate appropriate cutoffs along dimensions for clinical, research, or administrative decisions. Of course, reasonable people may disagree about how and where thresholds should be located. Basing thresholds on the extent of functional impairment will be opposed by some who argue that impairment should not be used in defining mental disorders (Lehman, Alexopoulos, Goldman, Jeste, & Üstün, 2002) and disputed by others who disagree over the amount of impairment needed for diagnosis. In the meantime, judgments about insurance coverage, disability compensation, and other unavoidable decisions will need to be made. Defensible thresholds for these sorts of decisions may need to be established before dimensional classification replaces categorical classification in clinical settings.

**Research.** Does the system facilitate the accumulation of knowledge? As noted by Widiger and Trull (2007), a valuable benefit of dimensional classification is the ability to set different cutoffs for different clinical decisions in different settings. One downside to this flexibility, however, may be a reduction in communication and data

sharing across settings that employ different cutoffs for the same disorder. Similar problems may ensue if different researchers use different diagnostic cutoffs for inclusion in clinical studies. An important priority is to ensure sufficient standardization of cutoffs to allow knowledge to amass across clinics and laboratories.

**Prediction.** Does the system powerfully predict important outcomes? The ultimate test of a diagnosis may be its ability to facilitate prediction of prognosis and treatment outcome (cf. Hayes, Nelson, & Jarrett, 1987). The additional information inherent in a dimensional score suggests that prediction should be improved with a dimensional model. However, if a disorder really is categorical in nature, dimensional variation around the categorical boundary may add nothing but measurement error (Ruscio & Ruscio, 2002). Consequently, whether a categorical or dimensional (or hybrid) model optimizes clinical prediction is an empirical question. This question is best answered through side-by-side comparisons of the predictive validity of competing models with respect to a range of significant external variables.

Widiger and Trull (2007) are to be commended for raising awareness of this important debate and working to resolve obstacles that have prevented the adoption of dimensional classification in prior *DSM* editions. It is incumbent on the field to address the challenging questions that remain in order to ensure that future classification systems are increasingly valid and useful.

## REFERENCES

- Cooksey, R. W. (1996). *Judgment analysis: Theory, methods, and applications*. San Diego, CA: Academic Press.
- Graham, J. R. (2000). *MMPI-2: Assessing personality and psychopathology* (3rd ed.). New York: Oxford University Press.
- Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. *American Psychologist*, *42*, 963-974.
- Lehman, A. F., Alexopoulos, G. S., Goldman, H., Jeste, D., & Üstün, B. (2002). Mental disorders and disability: Time to reevaluate the relationship? In D. J. Kupfer, M. B. First, & D. A. Regier (Eds.), *A research agenda for DSM-V* (pp. 201-218). Washington, DC: American Psychiatric Association.
- Meehl, P. E. (1986). Diagnostic taxa as open concepts: Metatheoretical and statistical questions about reliability and construct validity in the grand strategy of nosological revision. In T. Millon & G. L. Klerman (Eds.), *Contemporary directions in psychopathology: Toward the DSM-IV* (pp. 215-231). New York: Guilford Press.
- Ruscio, J., Haslam, N., & Ruscio, A. M. (2006). *Introduction to the taxometric method: A practical guide*. Mahwah, NJ: Erlbaum.
- Ruscio, J., & Ruscio, A. M. (2002). A structure-based approach to psychological assessment: Matching measurement models to latent structure. *Assessment*, *9*, 4-16.
- Ruscio, J., & Ruscio, A. M. (2004). Clarifying boundary issues in psychopathology: The role of taxometrics in a comprehensive program of structural research. *Journal of Abnormal Psychology*, *113*, 24-38.
- 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.

Preparation of this comment was supported by National Institute of Mental Health Award 1 K01 MH076162.

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DOI:10.1037/0003-066X.63.1.62

## Further Comments Toward a Dimensional Classification of Personality Disorder

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We appreciate the opportunity to respond to the comments of Garb (2008, this issue) and Ruscio (2008, this issue) regarding our article on integrating the classification of personality disorder with a dimensional model of general personality structure (Widiger & Trull, 2007). We have long regarded their work with considerable admiration and respect, and we value greatly their perspectives on our proposal. We cannot, of course, respond to all of their concerns given space limitations, but we attempt to respond to key points.

### Clinical Judgments

Much of Garb's (2008) commentary, and some of Ruscio's (2008), questions whether clinicians could reliably and validly administer a five-factor model (FFM) personality disorder assessment. We respectfully note that the studies that Garb referred to typically concern clinicians' applications of the existing diagnostic categories. Garb has identified valid concerns

regarding the reliability and validity of personality disorder diagnoses in general clinical practice, but these concerns have been raised precisely with respect to the existing diagnostic manual. Of course, the solution to his concerns is not simply to stay the course. It obviously does not help clinicians to be asking them to apply reliably and validly a diagnostic system that is so fundamentally flawed.

We do agree that there are inadequate data to know for certain if the problems identified by Garb (2008) would remain the same, improve, or worsen with a conversion to an FFM personality disorder assessment. However, we do expect that the situation would in fact improve. The FFM structure is relatively straightforward and conceptually coherent, being consistent with how personality is structured within the language (Widiger & Trull, 2007). In any case, we suggest that a model of classification that itself has better reliability and validity than the existing nomenclature does have more potential for a reliable and valid application.

### Feasibility

A related concern, raised by both Garb (2008) and Ruscio (2008), is feasibility. Garb noted that at least there are written diagnostic criteria for the existing personality disorder diagnoses. Rest assured that an FFM of personality disorder included within the American Psychiatric Association's diagnostic manual would be as explicit as the existing diagnostic criterion sets. We fully agree that explicit diagnostic rules are necessary for the obtainment of reliable and valid diagnoses (Widiger & Mullins-Sweatt, in press). We personally rely on self-report inventories and semi-structured interviews to obtain our personality assessments (Widiger & Lowe, in press), but we have also developed brief rating scales and are currently developing diagnostic criterion sets.

Ruscio (2008) questioned as well whether an FFM personality disorder assessment can be implemented in the limited time available to clinicians. Clinicians do not have the time to conduct a systematic and comprehensive assessment of the existing criterion sets and probably would not have the time to administer a complete FFM semi-structured interview. We note that a systematic and comprehensive FFM personality disorder assessment generally takes half the time that is required for the diagnosis of existing personality disorders even though it covers normal as well as abnormal personality traits (Widiger & Lowe, in press). This is largely because there is considerable redundancy among