Dimensional approaches in diagnostic classification: a critical appraisal

MARSHA F. LOPEZ,1 WILSON M. COMPTON,1 BRIDGET F. GRANT,2 JAMES P. BREILING,3
1 National Institute on Drug Abuse, USA
2 National Institute of Alcohol Abuse and Alcoholism, USA
3 National Institute of Mental Health, MD, USA

Clinicians and researchers alike struggle to diagnose psychiatric conditions in a manner that is etiologically and therapeutically meaningful. The Diagnostic and Statistical Manual (DSM) system as it currently exists falls short of achieving these goals because without satisfactory grounding in etiology, any diagnostic rubric will remain suboptimal. In the meantime, after decades of categorical approaches to psychiatric disorder through the DSM, science is considering a shift toward integrating new dimensional applications with the current categorical approaches.

This special issue represents a collaboration among the National Institute on Drug Abuse, the National Institute on Alcohol Abuse and Alcoholism, the National Institute of Mental Health, and the American Psychiatric Association to address questions and issues related to dimensional aspects of specific diagnostic areas, including a review of the existing research and clinical practices and development of an agenda for future investigation. Regardless of whether the recommendations of these workgroups will result in the introduction of dimensional approaches into the DSM-V, the ultimate goal is to improve clinical research and apply gained knowledge to reduce disability and burden from psychiatric illness.

Psychiatry is at a crossroads with DSM-V. Research and clinical practitioners seek to determine whether the field is ready for diagnoses based on continuous measures of psychopathology. This readiness exists on at least two levels. First, there is clear evidence that psychiatric disorders can be measured dimensionally. Second, this evidence offers promise for translation into clinical decision-making. With recent innovations in statistical methods and research practices, it has become clear that psychopathology can be viewed not only as absent or present, but dimensionally, via measures such as frequency and severity that can assist in determining a therapeutic path (Kessler, 2002; Krueger et al. 2005; Saha et al., 2006). Yet, despite convincing research findings, clinicians face a difficult problem in determining the point at which a patient is in need of treatment or follow-up care. The cut points stipulated in the current DSM system determine who does and who does not receive a diagnosis, and who does and does not receive treatment.

Complicating matters, readiness of the field for dimensional diagnostic approaches is not consistent across all the psychiatric disorders represented in the DSM. For example, in the case of substance use disorders, measures of frequency of use provide a relatively straightforward way to incorporate a severity dimension, whereas psychoses do not have a convenient analogous proxy for severity. That example does not demonstrate that psychoses can not be measured in a dimensional fashion, but it illustrates a difficulty to be addressed in considering a shift from exclusively categorical definitions of psychiatric disorders to more continuous measures of psychopathology.

Leaders in research and clinical practice of psychiatry gathered to confront questions of readiness for and feasibility of dimensional diagnoses, and this special issue is a product of those discussions. We hope that this volume addresses several important issues: (1) how to create and apply dimensional measures to specific disorders, (2) how dimensional approaches can enhance diagnostic precision, (3) the co-occurrence of
psychiatric disorders, (4) syndrome thresholds, and (5) feasibility of applying dimensional measures in clinical settings. In addition, a major objective is to identify ways of incorporating developmental, demographic, and genetic findings into the threshold models. A goal is to determine the appropriateness of blending dimensional and categorical approaches, and to provide disorder specific recommendations for their integration.

We at the National Institutes of Health are excited to see these issues addressed after years of discussion in meetings and the literature. Although psychiatry may not be currently able to incorporate dimensional aspects of diagnosis throughout the DSM-V, it is certainly ready to consider the implications of such major changes in the approach to classification. Our hope is that the resulting recommendations will transform psychiatric research and practice such that advancements in identifying, preventing, and treating psychopathology will improve mental health and addiction outcomes worldwide.

References
Krueger RF, Watson D, Barlow DH. Introduction to the special section: toward a dimensionally based taxonomy of psychopathology. J Abnorm Psychol 2005; 114(4): 491–3; and subsequent articles.
Saha TD, Chou SP, Grant BF. Toward an alcohol use disorder continuum using item response theory: results from the National Epidemiologic Survey on Alcohol and Related Conditions. Psychol Med 2006; 36(7): 931–41.

Correspondence: Marsha F. Lopez, Ph.D., M.H.S, Division of Epidemiology, Services, and Prevention Research, National Institute on Drug Abuse (NIDA), 6001 Executive Boulevard, Rm. 5156, MSC 9589, Bethesda, MD 20892-9589, USA.
Phone: (301) 402-1846
Fax (301) 443-2636
Email: lopezmar@nida.nih.gov