

# **A Research Agenda for DSM-V**

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# CHAPTER 1

## Basic Nomenclature Issues for DSM-V

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### Introduction

The criteria and format used in DSM-III, DSM-III-R, DSM-IV, and DSM-IV-TR (American Psychiatric Association 1980, 1987, 1994, 2000a) arose from psychiatric diagnostic traditions of North America and were crafted to be readily used by practicing psychiatrists. However, the effect of the DSMs has extended far beyond the boundaries of psychiatric practice in North America in a number of ways that have revealed limitations in the current system.

First, the American criteria are used in research and practice throughout the world, highlighting incompatibilities with the alternative diagnostic system of the *International Statistical Classification of Diseases and Related Health Problems*, 10th Revision (ICD-10) (World Health Organization 1992) and difficulties in applying DSM criteria across cultures.

Second, primary care medical practitioners have increasingly taken on the identification and initial treatment of patients with mental disorders. This laudable development promises to bring treatment to many patients whose conditions have been undiagnosed and untreated. However, the need to operationalize the diagnostic process in nonpsychiatric settings has posed important challenges to practitioners.

Third, criteria listed in the DSMs have been uncritically used by legal professionals and health care administrators as representing lapidary, received wisdom about the nature of mental disorders. This high-impact but uncritical use fails to recognize the variability in the level of empirical support for the reliability and validity of different diagnoses. If the text or cri-

teria included a more explicit rating of empirical support for the different diagnoses, users unfamiliar with the field might be less likely to assume that criteria for all listed disorders are equally well established. Another factor underlying potential misinterpretation of DSM is the degree to which many, if not most, conditions and symptoms represent a somewhat arbitrarily defined pathological excess of normal behaviors and cognitive processes. This problem has led to criticisms that the system pathologizes ordinary experiences of the human condition, such as normal bereavement or the rebelliousness of adolescents. If the diagnostic system included criteria or decision rules that explicitly acknowledged the continuum nature of symptoms and disorders, this would place the pathological nature of more extreme symptomatic behavior into context. In particular, it may be helpful to find ways to denote a distinction between mild or borderline cases and clear-cut or severe cases.

Given this broad impact and the increasing importance of DSM criteria, these limitations in the system take on added significance. The purpose of this chapter is to address a series of basic topics for consideration in the DSM-V revision process and to outline a research agenda for issues that lend themselves to empirical testing. Topics include 1) defining *mental disorder*, 2) considerations in validating diagnostic criteria and categories, 3) establishing rationales for changing existing categories or criteria, 4) determining whether a dimensional approach should be substituted for the current categorical approach to diagnosis, 5) increasing compatibility between DSM-V and ICD-11, 6) addressing the applicability of criteria across different cultures, and 7) facilitating the diagnostic process in non-psychiatric settings.

## **How to Define *Mental Disorder***

Medicine has never had agreed-on definitions of its most fundamental terms, disease and illness, and most physicians have always been content to assume that their meanings were self-evident. Significantly, the World Health Organization (WHO) has always avoided defining *disease*, *illness*, or *disorder* in the successive revisions of the *International Classification of Diseases, Injuries and Causes of Death* (now called the *International Statistical Classification of Diseases and Related Health Problems*). The current (ICD-10) *Classification of Mental and Behavioral Disorders* simply states that “the term *disorder* is used throughout the classification, so as to avoid even greater problems inherent in the use of terms such as *disease* and *illness*. *Disorder* is not an exact term, but it is used here to imply the existence of a clinically recognizable set of symptoms or behavior associated in most cases with dis-

trous and with interference with personal functions” (World Health Organization 1992, p. 5).

Like its predecessors DSM-III and DSM-III-R, the current edition of the *Diagnostic and Statistical Manual of Mental Disorders*, DSM-IV-TR, does provide a detailed definition of the term *mental disorder*. Although this definition is rather lengthy (146 words) and contains numerous subclauses and qualifications, it is not cast in a way that allows it to be used as a criterion for deciding what is and is not a mental disorder, and it has never been used for that purpose. The definition does include a clear statement that “neither deviant behavior nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of a dysfunction in the individual,” but the definition fails to define or explain the crucial term *dysfunction*, except to say that it may be “behavioral, psychological, or biological” (p. xxxi).

Despite the difficulties involved, it is desirable that DSM-V should, if at all possible, include a definition of *mental disorder* that can be used as a criterion for assessing potential candidates for inclusion in the classification, and deletions from it. If for no other reason, this is important because of rising public concern about what is sometimes seen as the progressive medicalization of all problem behaviors and relationships. Even if it proves impossible to formulate a definition of mental disorder that provides an unambiguous criterion for judging all individual candidates, there should at least be no ambiguity about the reason that individual candidate diagnoses are included or excluded. The task force that produced DSM-IV assumed, or asserted, that there is no fundamental difference between so-called mental illnesses or disorders and physical illnesses or disorders, and that the distinction between them is simply a relic of Cartesian dualism (American Psychiatric Association 1994). Others have taken the same view (Kendell 2001). If this view is retained, the fundamental issue is the meanings of the terms *illness* and *disorder* in general.

### ***Definitions of Illness and Disorder***

The most contentious issue is whether *disease*, *illness*, and *disorder* are scientific biomedical terms or are sociopolitical terms that necessarily involve a value judgment. Usually, although not invariably, physicians have maintained that they are biomedical terms, whereas most philosophers and social scientists have argued that they are sociopolitical terms. The issue has attracted a good deal of attention in the past decade, mainly in response to a closely argued analysis of the concept of mental disorder by Wakefield (1992).

There are at least four fundamentally different types of definition re-

flecting differing assumptions about the nature of disease or disorder. These are described below.

**Sociopolitical.** Although it has been suggested in the past that disease is simply what doctors treat, there are no current advocates for such a simplistic view. The simplest plausible sociopolitical definition is that a condition is regarded as a disease if it is agreed to be undesirable (an explicit value judgment) and if it seems on balance that physicians (or health professionals in general) and their technologies are more likely to be able to deal with it effectively than are any of the potential alternatives, such as the criminal justice system (treating it as crime), the church (treating it as a sin), or social work (treating it as a social problem).

The attraction of this approach is that it is essentially pragmatic or utilitarian. Whether the antisocial behavior of habitual delinquents, for example, is best regarded as criminal behavior or as a manifestation of antisocial personality disorder would be determined by the relative success of the criminal justice system versus psychiatry and clinical psychology in reducing the antisocial behavior; and whether restless, overactive children with short attention spans are regarded as having attention-deficit/hyperactivity disorder or simply as being difficult children would depend on whether child psychiatrists were better at ameliorating the problem than parents and teachers. A further implication is that a given condition might be a mental disorder in one setting but not in another, depending on the relative efficacy of medical and other approaches to the problem in those different settings.

Although sociopolitical definitions of this kind have rarely been advocated by physicians, treatability is often a crucial consideration underlying their decisions to regard individual phenomena as diseases. For example, despite the advocacy of Thomas Trotter and Benjamin Rush at the beginning of the nineteenth century and a sustained campaign by Alcoholics Anonymous in the 1930s, the medical profession firmly resisted the proposal that alcoholism should be regarded as a disease until disulfiram (Antabuse) was introduced in the late 1940s. For a few years, this drug was widely hailed as a dramatically effective treatment for the condition, and it was in this climate that the American Medical Association and similar bodies throughout the world issued formal statements to the effect that alcoholism was a disease after all.

In fact, the most defensible justification of the steady increase in the number of officially recognized mental disorders that has occurred over the last 50 years is the development of an increasing range of at least partly effective therapies.

**Biomedical.** The most widely quoted purely biomedical criterion of disease is the “biological disadvantage” originally proposed by Scadding (1967). Scadding, a chest physician, defined a disease as “the sum of the abnormal phenomena displayed by a group of living organisms in association with a specified common characteristic or set of characteristics by which they differ from the norm for the species in such a way as to place them at a biological disadvantage” (p. 877). He never elaborated on what he meant by *biological disadvantage*, but Kendell (1975a) and Boorse (1975) both argued that it must at least encompass reduced fertility and life expectancy.

Although many mental disorders are associated with a reduced life expectancy and some, like schizophrenia, are associated with a conspicuously reduced fertility as well, Scadding’s biological disadvantage criterion has perverse consequences when applied to the domain of mental disorder. Many milder conditions such as phobias as well as disorders with onset after the prime reproductive years would fail to qualify as disorders, whereas other conditions that are not regarded as mental disorders, such as homosexuality, would fall under Scadding’s definition of *disorder*.

**Combined biomedical and sociopolitical.** Wakefield (1992, 1999) argues that mental disorders are biological dysfunctions that are also harmful, implying that the concept of mental disorder necessarily involves both a scientific or biomedical criterion (dysfunction) and an explicit value judgment or sociopolitical criterion (what he calls *harm* and the WHO refers to as *handicap*). This view is attractive because it meets the main requirement of both the sociopolitical and the biomedical camps, and also because it seems to reflect the often intuitive ways in which physicians make disease attributions and does not have any obviously unacceptable implications.

Wakefield originally proposed that *dysfunction* should imply the failure of a biological mechanism to perform a natural function for which it had been designed by evolution, but Lilienfeld and Marino (1995) and Kirmayer and Young (1999) subsequently pointed out that this evolutionary perspective raises many problems. Too little is known about the evolution of most of the higher cerebral functions whose malfunctioning probably underlies many mental disorders. Mood states such as anxiety and depression may have evolved as biologically adaptive responses to danger or loss rather than being failures of evolutionarily designed functions; and several important cognitive abilities, like reading, have been acquired too recently to be plausibly regarded as natural functions designed by evolution. It is, of course, perfectly possible in principle to define *dysfunction* without reference either to evolution or to biological disadvantage. The problem is that too little is known about the cerebral mechanisms underlying basic psychological functions, such as perception, abstract reasoning, and memory, for

it to be possible in most cases to do more than infer the probable presence of a biological dysfunction. Furthermore, rejecting both the evolutionary (Wakefield 1992, 1999) and biological disadvantage (Scadding 1967) criteria may open the way to regarding a wide range of purely social disabilities (such as aggressive, uncooperative behavior or an inability to resist lighting fires or stealing) as mental disorders.

**Ostensive.** Lilienfeld and Marino (1995) contend that it is impossible even in principle to provide a “semantic” or “operational” definition of the global concept of mental illness or disorder, only of individual illnesses or disorders. The only criterion available, they suggest, is whether putative or candidate disorders are sufficiently similar to the prototypes of mental disorder, and both the term *similar* and the choice of prototypes (schizophrenia and major depressive disorder, perhaps) are obviously open to a range of interpretations.

There is a plausible argument that the fundamental reason why medicine has never succeeded in providing a satisfactory definition of disease is that it has always been primarily concerned with the identification and treatment of individual diseases, and these are very heterogeneous because they have been identified at various stages over the last 400 years with defining characteristics of quite varied kinds. Some, like migraine and torticollis, are still defined by their clinical syndromes; others, such as mitral stenosis, by their morbid anatomy; tumors of all kinds by their histopathology; most infections by the identity of the causative organism; porphyria by its biochemistry; Down syndrome by its chromosomal architecture; the thalassemias by abnormal molecular structures; and so on. Whether or not this is a convincing argument, it does not account for psychiatry’s difficulty in defining mental disorders, because most mental disorders are still defined by their clinical syndromes.

#### ***Research Implications of Alternative Approaches to the Definition of Mental Disorder***

Although the choice among the foregoing four disorder concepts will not be resolved on the basis of empirical data, research could clarify the implications of that choice and could also provide a broader, empirically derived perspective about how clinicians conceptualize *disorder*.

#### Research Agenda

- Analyze the concepts of mental disorder underlying disorders currently listed in DSM-IV, evaluating the degree to which they conform to sim-



ilar or different general conceptualizations of disorder enumerated above. This process could eliminate constructs that fail to apply to a preponderance of currently recognized disorders.

- Conduct surveys, within the United States and internationally, to elucidate the concepts of disease or of mental illness or disorder used, explicitly or implicitly, by psychiatrists, other physicians, clinical psychologists, research workers, patients, health care providers, and members of different social and ethnic groups. This could be done either by exploring the meaning they attribute to such terms or by asking them to decide which of a list of contentious conditions they themselves regarded as diseases or mental disorders, an approach taken by Campbell and colleagues (1979) in an influential Canadian survey.
- Conduct studies (involving the same populations listed above) designed to elucidate views and assumptions about the relationship between people with recognized mental disorders and others who have the same symptoms intermittently or in milder form (i.e., the boundary between illness and normality).

## Validity

Validity is a complex construct that has been extensively explored in the psychometric literature. The purpose here is not to attempt to review this large body of literature (which examines many subtypes of validity) but rather to focus on the uses of validity in psychiatric nosology. The logical starting point for any such discussion is the often-cited Robins and Guze paper of 1970. In this paper the authors proposed five phases for establishing diagnostic validity in psychiatric illness: clinical description, laboratory studies, delimitation from other disorders, follow-up study, and family study. The weight of the validation process fell, according to their system, on the final two steps, in which the goal was to demonstrate diagnostic homogeneity over time and familial aggregation of the putative syndrome. Kendler (1990) later expanded on this list of potential validators, differentiating between antecedent validators (e.g., family studies, premorbid personality, demographic factors, and precipitating factors), concurrent validators (e.g., psychological or biological test data), and predictive validators (e.g., diagnostic consistency, overall functioning over time, and response to treatment).

As we approach DSM-V, what might be said on the basis of more than 20 years of experience with such validating systems for psychiatric illness? First, they are not specific. Many things that are not valid psychiatric diagnoses (such as large noses) run in families. Second, there is no strong a

priori rationale to suspect that the application of different diagnostic validators to a given nosologic problem would produce the same answer. For example, the evidence is now relatively compelling that if one wants to define schizophrenia as a disorder with high diagnostic stability and poor outcome, then choosing a narrow criteria set that requires prior chronicity (e.g., 6 months of illness) is very effective (Kendler et al. 1989). By contrast, if the validating criterion to be applied is familial aggregation, then the diagnosis would be *much* broader and would include a range of other psychotic disorders as well as schizophrenia-spectrum personality disorders (Baron et al. 1985; Kendler et al. 1994, 1995). This lack of congruence of results expected from various validators poses a profound problem for the nosologic process. It means that a hierarchy of validators must first be chosen for a given nosologic question. Unfortunately, this choice is fundamentally a value judgment and cannot be directly addressed by empirical inquiries (Kendler 1990). For the example above, the question boils down to “What is the core feature of schizophrenia—that it has a poor outcome or that it runs in families?” This is not a scientific question. At the second stage, once the critical validators are agreed on, only then can the process of formulating maximally valid criteria sets occur.

A third potential dilemma with the process of validation for psychiatric disorders is that it is based on a falsely optimistic assumption: that psychiatric disorders are discrete biomedical entities with clear phenotypic boundaries. Is it possible that—partially in reaction to the antidiagnostic approaches of psychoanalysis—the Washington University School (and later DSM-III and future additions) overreacted and grasped too firmly for the mantle of legitimacy provided by the diagnostic concepts of infectious disease and tumor pathology? It may be that medical syndromes such as hypertension, osteoarthritis, and tension headache are better models for psychiatric disorders than are pneumococcal pneumonia or stage IV glioblastoma. If psychiatric disorders are actually broad biobehavioral syndromes—fuzzy sets that inevitably blur into one another and into normality—what implications does this have for the validation process?

Fourth, is it possible to develop a coherent hierarchy of validators that would cut across all diagnostic categories in psychiatry? In medicine, the most definitive diagnoses are almost always etiologically based. Many of the most common validators used in psychiatry might be termed “practical,” such as outcome or response to treatment. Should we argue that the value of a validator should be judged by the degree to which it reflects etiologic processes? Following this line of reasoning, we might conclude that family and genetic validators are of greater value than prognosis or course of illness, which would result in a rather radical redesign of the concept of schizophrenia. Alternatively, should it be argued that—although etiologi-

cally based diagnosis is the ultimate goal of psychiatric nosology—this is currently impractical and the time-honored practical validators—course, outcome, response to treatment, etc.—should continue to be used until the level of knowledge about the pathophysiology of psychiatric disorders improves far beyond its current state?

Although research cannot directly address the problem of the best hierarchy of validators, it can provide information about the nature of the problem. For example, it would be valuable to construct, from available data, the alternative criteria sets for several major diagnoses (e.g., schizophrenia, major depressive disorder) that would be developed on the basis of different critical validators (e.g., prognosis, response to treatment, or familial aggregation). This exercise would, at a minimum, give us a sense of the magnitude of the problem and might point toward possible solutions in that some of the criteria sets so developed might have obviously higher face validity than others.

### System for Rating of Diagnoses

One of the most valid criticisms of DSM-III, DSM-III-R, and DSM-IV is that a naive reader would have no easy way of knowing that the knowledge base from which the different criteria were developed and validated differ markedly across diagnoses. It is potentially misleading for the manuals to imply that the criteria for major depressive disorder and histrionic personality disorder are of equal validity.

In part, the DSMs have already recognized this problem by the creation of an appendix that contains criteria sets provided for further study. But the existence of this appendix does not address the tremendous heterogeneity of information available on the many categories within the main part of the manual.

Should DSM-V contain a rating of the quality and quantity of information available to support the different diagnostic systems? The advantage of such an approach is straightforward—it would inform the reader about the highly variable state of knowledge with regard to various psychiatric disorders. One possibility would be that the highest of these ratings would be reserved for the small number of psychiatric disorders with a relatively clearly delineated pathophysiology (e.g., Alzheimer's disease).

Four questions that raise potential disadvantages are worth considering. First, what criteria would be used to rate the individual diagnostic categories? Would it be possible to be quite objective (e.g., the number of peer-reviewed publications with a given sample size), or would the complexity of the available information inevitably reduce the rating to a complex and only moderately reliable gestalt judgment? Second, what exactly

would be rated? In particular, how much should the rating reflect what is generally known about the disorder versus what is known about the specific criteria? Third, what would be the effects on individuals with low-rated disorders and on the reimbursement for these disorders? Would patients become distraught? Would the insurance companies refuse to pay? Fourth, would the ratings become self-perpetuating in that it would be difficult to obtain funding to study disorders with low ratings, thereby maintaining the paucity of research?

### Rationale for Changing Criteria

Traditionally, when changes in criteria in a diagnostic system are contemplated, the positive features of such changes (e.g., improvements in reliability or validity, greater ease of use, or superior discriminatory ability) are emphasized. To obtain a balanced view of the benefits and risks of changes of criteria requires a review of the disadvantages of changing criteria, of which seven deserve particular attention. First, any alterations in diagnostic criteria require that such changes be learned by thousands of clinicians. Inevitably, changes induce a certain amount of confusion (were those DSM-III-R criteria or DSM-IV?) in the mind of any busy clinician. Interestingly, small changes may be more difficult to commit to memory than large changes. Second, many health-related documents, including medical record forms and treatment algorithms, rely on DSM criteria. Changes in the criteria sometimes require changes in these forms. Third, changes in diagnostic criteria impair the cumulative capacity of research. A critical goal of psychiatric research is to develop a rigorous database examining the etiology, course, and treatment of the major psychiatric disorders. In the move toward evidence-based medicine, meta-analyses are more and more the standard form of data summary. Homogeneity of diagnostic classification would be an important criterion for any meta-analysis. Fourth, changes in diagnostic criteria pose special problems for longitudinal research projects—often the source of our best information about the causes and consequences of psychiatric illness. The longitudinal researcher is faced with the uncomfortable choice of either keeping to the older diagnostic system and risk being considered (by readers and review committees) as old-fashioned and behind the times, or changing to new criteria and thereby creating discontinuity in the nature of the data collected. Fifth, any change in diagnostic criteria necessitates the development of a new generation of structured psychiatric interviews to evaluate the new criteria. Sixth, inevitably questions will arise about differences between the new and old criteria. Do they define the same patient population? Do they differ in their ability to predict outcome or familial aggregation? Often, a small “cottage

industry” of research is spawned to answer these questions. It is possible that our limited research resources could be better spent elsewhere. Finally, and probably most difficult to quantify, is the possibility that frequent changes in diagnostic criteria can potentially discredit the revision process and increase the chances of the DSMs becoming a subject of ridicule.

Given an appreciation of the important potential benefits and significant potential disadvantages of changes in diagnostic criteria, how are these two to be balanced? What justification should be established for the changing of diagnostic criteria? The obvious answer would be “when the advantages outweigh the disadvantages.” But how can this be evaluated? How much improvement in reliability or simplification of criteria are worth the disadvantages of making changes?

Although it is impossible to suggest any compelling guidelines for this difficult issue, two general points can be made. First, small changes have nearly as many disadvantages as large changes but are less likely to have strong benefits. Second, despite protestations to the contrary, any committee-based review process for a diagnostic system may be biased toward making changes. For many on these committees, the common human urge to make a contribution or to do it better may be irresistible. For others, possible future career success may be affected by their ability to make changes in “their” diagnosis or to have “their” category formally recognized in DSM-V. Ultimately, these understandable human impulses, if not restrained, can have a highly negative cumulative impact on the nosologic system that we all use. Although the DSM-IV revision process had built-in safeguards to reduce the likelihood of such problems (e.g., a requirement that committee decisions be reached by consensus, reviews by large numbers of outside consultants, and veto power over committees by the DSM-IV task force), the potential remained for nonscientific biases to affect the nosologic system.

## **Dimensions Instead of Categories?**

DSM-IV and ICD-10 are both categorical classifications or typologies, and so were all their predecessors. In principle, though, variation in the symptomatology of mental disorder could be represented by a set of dimensions rather than by multiple categories. Indeed, Wittenborn et al. (1953) developed a multidimensional representation of the phenomena of psychotic illness nearly 50 years ago, and since then others have developed dimensional models to portray the symptomatology of depressive and anxiety disorders, schizophrenia, and even the entire range of psychopathology.

In other branches of medicine, however, classifications of disease have

invariably been typologies. This is partly because it is a fundamental characteristic of human mentation, embodied in the nouns of everyday speech, to recognize categories of objects (horses, chairs, planets, etc.), and partly because it has traditionally been assumed that most diseases were discrete entities. In the past most psychiatrists assumed that mental disorders were also discrete entities, separated from one another, and from normality, either by recognizably distinct combinations of symptoms or by demonstrably distinct etiologies; indeed, this has been shown to be so for a small number of conditions (Down syndrome, fragile X syndrome, phenylketonuria, Alzheimer's and Huntington's diseases, and Creutzfeldt-Jakob disease, for example). In the past 20 years, however, the disease entity assumption has been increasingly questioned as evidence has accumulated that prototypical mental disorders such as major depressive disorder, anxiety disorders, schizophrenia, and bipolar disorder seem to merge imperceptibly both into one another and into normality (Kendler and Gardner 1998) with no demonstrable natural boundaries or zones of rarity in between. Furthermore, both the genetic and environmental factors underlying these syndromes are often nonspecific (Brown et al. 1996; Kendler 1996).

As a result, well-informed clinicians and researchers have suggested that variation in psychiatric symptomatology may be better represented by dimensions than by a set of categories, especially in the area of personality traits (Widiger and Clark 2000) (see Chapter 4 in this volume for a more detailed discussion of a dimensional approach to personality). Indeed, Cloninger (1999) stated firmly that "there is no empirical evidence" for "natural boundaries between major syndromes" and that "the categorical approach is fundamentally flawed" (pp. 174–175). It is also worth noting that the philosopher Hempel observed 40 years ago that most sciences start with a categorical classification of their subject matter but often replace this with dimensions as more accurate measurement becomes possible (Hempel 1961).

Against this background it is important that consideration be given to advantages and disadvantages of basing part or all of DSM-V on dimensions rather than categories. There would be some obvious attractions in doing so (Kendell 1975b). The problems posed by patients who fulfill the criteria for two or more categories of disorder simultaneously, or who straddle the boundary between two adjacent categories, would disappear, as would the procrustean need to distort the symptoms of individual patients to fit a preconceived stereotype. More useful information would be conveyed, and a new realism might be introduced into clinicians' assumptions about the nature of mental disorders. The disadvantages are equally obvious. Clinicians are accustomed to thinking in terms of diagnostic catego-

ries, and most existing knowledge about the causes, presentation, treatment, and prognosis of mental disorder was obtained, and is organized, in relation to these categories. Prompt and appropriate decisions about the management of individual patients are also much easier if the patient can be confidently allocated to a category rather than to a locus in a multidimensional space. It is probably significant that most of the advocates of dimensional representation are not practicing clinicians but are primarily theoreticians.

Partly for these reasons, and also because no up-to-date, widely accepted dimensional representation exists at present in any field of psychopathology, it is probably premature to contemplate a largely dimensional DSM-V. At the same time, there is a clear need for dimensional models to be developed and for their utility to be compared with that of existing typologies in one or more limited fields, such as personality (see Chapter 4 in this volume). If a dimensional system of personality performs well and is acceptable to clinicians, it might then be appropriate to explore dimensional approaches in other domains (e.g., psychotic or mood disorders).

## **Reducing the Gaps Between DSM-V and ICD-11**

The reconciliation process during the development of DSM-IV and ICD-10 made the systems more compatible and created crosswalks between the systems. However, many small and large differences persist at both syndrome and criterion levels. These persistent discrepancies suggest the need for a program of research to compare and reconcile the minor differences and, in the case of major differences, to explore the validity of the alternative constructs.

When DSM-III was published in 1980, one of its most important advantages was a radical improvement in the reliability of psychiatric diagnosis by virtue of its provision of operational criteria for each diagnosis. It was subsequently revised in 1987 as DSM-III-R and then again in 1994 as DSM-IV, the latter revision in particular being informed by a comprehensive review of the available research. ICD-10 followed a similar format, but the text was placed in one book of clinical descriptions, published in 1992, and the diagnostic criteria appeared in another book, published in 1993. To many people the classifications seemed parallel, and the American Psychiatric Association published an international edition that contained the ICD-10 numbering system applied to the DSM-IV descriptions and criteria. The classifications are not identical, however, and their parallel exist-

tence causes unnecessary confusion in international research and in the recording of health statistics.

The advent of precise diagnostic criteria in both systems meant that fully structured diagnostic interviews could be developed. The WHO Composite International Diagnostic Interview (CIDI; World Health Organization 1993), guided by an editorial committee balanced between DSM and ICD, was able to operationalize, for the common mental disorders, each and every diagnostic criterion set in both DSM-IV and ICD-10 to produce CIDI v. 2.1. This is available in computerized form and was used in the Australian national mental health survey. It is to be used in a forthcoming 10-country survey convened by Kessler and Üstün.

Data from the pilot for the Australian survey was used for an initial comparison between ICD-10 and DSM-IV. The results (Andrews et al. 1999) indicated numerous significant differences between the two systems. The sample was enriched by a two-stage sampling procedure, and 37% of respondents had symptoms that met criteria for one or more ICD-10 12-month diagnoses; 32% met criteria for the corresponding DSM-IV diagnoses. In general, DSM-IV disorders were diagnosed at lower rates (Andrews et al. 2001). Across the affective, anxiety, and substance-use diagnoses examined, only 68% of people whose symptoms met criteria on either classification met criteria on both, whereas 32% were discordant (i.e., meeting criteria only in one system). Agreement occurred in less than 75% of cases in social phobia, agoraphobia without panic disorder, panic disorder with and without agoraphobia, obsessive-compulsive disorder, posttraumatic stress disorder, and substance abuse or harmful use. Calculations of the burden of disease show substantial cross-system differences in years lived with disability with sedative dependence, alcohol harmful use, obsessive-compulsive disorder, and dysthymia, all of which were discordant by more than 40%. Thus, disagreements in the classifications do make differences. The reasons for the disagreement were explored in a series of papers and, with the exception of substance abuse/harmful use criteria (which describe quite different concepts), the intention of the other definitions seemed very similar. In a number of cases, clerical errors in the transfer of the ICD clinical descriptions into the diagnostic criteria accounted for the dissonance. For many diagnoses, however, what seem to be trivial differences in wording of the diagnostic criteria or threshold numbers of symptoms accounted for the dissonance. A program of research is needed to determine whether the DSM or ICD definition is closer to the research evidence.

In a review of the inclusion and exclusion criteria for the anxiety disorders in ICD-10 and DSM-IV, Andrews (2000) discovered that the inclusion criteria differ in what appears to be needless ways. The problem with the



exclusion criteria is more fundamental: there is no agreement between the classifications, as though the exclusion criteria were written haphazardly. There is a real need for a review of the principles that should be used for the exclusion criteria before the actual criteria for each diagnosis are formulated.

All countries in the world are obliged to report health statistics in accordance with the ICD-10 classification. However, for reasons outlined above, the DSM system is becoming, exactly as First and Pincus (1999) suggested, the de facto world standard, certainly for research and therefore increasingly so for clinical discourse. This widens the discrepancy between research findings and administratively important health statistics and estimates of burden of disease. Given the importance of minimizing (if not eliminating) future differences between the two systems, the next revision process could include steps to achieve this goal. For example, with international input into each DSM-V committee, it might be possible to agree to delete nonessential differences and create a single definition for most disorders, with alternate classifications for the occasional disorders on which conceptual agreement could not be reached. If these conflicting descriptions were distinct enough, decisive research could be conducted internationally in the period before publication, so that dissonance could be minimal by the time of publication. Dissonance that is unresolved might well be an example of cultural factors influencing views of sickness.

## Research Agenda

- Replicate the present ICD-DSM dissonance estimates and identify minor differences that could be simply reconciled.
- Identify procedural errors in either classification and recommend corrections.
- Define principles to govern the exclusion strategies and apply them.
- When differences are substantial, define a research strategy to assess the comparative validity and reliability of ICD and DSM disorders and criteria. Existing data sets on epidemiological or clinical samples characterized by both ICD and DSM criteria offer an immediate opportunity for research on the comparative reliability and validity of alternative definitions. In particular, more information is needed on the comparative validity of alternatively defined disorders, particularly pertaining to clinical course, including response to treatment.

We acknowledge the apparent contradiction between our dictum against unnecessary change and the potentially sweeping changes in DSM-V

that would be required to develop a single international system reconciling the future DSM and ICD classifications. In the current planned timetable for revising the two systems, ICD-11 will not be developed until some time after the publication of DSM-V. Unless reconciliation is to come about by the WHO's wholesale adoption of DSM-V, numerous small and large changes in current DSM-IV criteria will need to be made to formulate a single system that is acceptable to both organizations. As noted above, even seemingly trivial changes in criterion wording or exclusion criteria can have a large impact in research settings and may be difficult to apply in practice because small changes are difficult to learn and remember. Given the very large number of changes required to reconcile the systems, it is unlikely that more than a handful of choices between DSM and ICD criteria can be informed by strong empirical evidence for superior reliability or validity of either system. Ultimately, the decision to create a single unified, worldwide system for diagnosing mental disorders must arise from a judgment by the leadership of the American Psychiatric Association and the WHO that the benefits derived from a single system outweigh the disadvantages of many changes required to create this system.

## **Cross-Cultural Use of DSM-V**

Applying DSM criteria across cultures, even those within the same society, country, continent, or world region, poses a significant challenge to clinicians and researchers alike. This section addresses cultural issues related to nomenclature and the utility of diagnostic systems and procedures across cultures (a more comprehensive overview of cultural issues in diagnosis is presented in Chapter 6, in this volume). Although nomenclature per se may be acceptable, the cultural perspective would pay more specific attention to the meaning of statements reflecting diagnostic or clinical criteria in different parts of the world. The premise is that populations, groups, and communities living in different regions have different norms regarding instrumental functioning (work roles), different spiritual and religious beliefs and practices, different cultural habits and perceptions of mental health and mental illness, and different precepts regarding professional treatment (Kleinman 1980). The interpretation of diagnostic criteria is an idiosyncratic process related to the unique perceptions of the culture where they are to be applied. This, undoubtedly, is another aspect of the tension between the localistic and universalistic perspectives on the applicability of diagnosis (Kleinman 1988). Behaviors are judged differently, and different opportunities and treatment resources are available because of such perceptions. Professionals devoted to the care of patients with mental illness,

emotional problems, or behavioral difficulties may use different therapeutic approaches ranging from herbs, natural folk rituals, counseling, or psychotherapy to the use of psychotropic medications or psychoactive substances.

To foster cross-cultural applicability of DSM constructs, norms, and guidelines, research aimed at determining the presence of symptoms, the delineation of syndromes, and ultimately the diagnostic criteria (along categorical or dimensional lines) will have to be adopted following two general directions: 1) clear delineation of core diagnostic criteria, desirably applicable to all societies, cultures, and countries throughout the world, and 2) recognition of cultural and cross-cultural variants in symptom definition and behavioral and symptomatic manifestations.

These two seemingly contradictory approaches may not necessarily exclude each other, because it is accepted that culture plays a pathogenic rather than an etiologic role in the causation of mental disorders, that is, being a contributing factor and not a primary, basic one in the process of becoming mentally ill. The cultural perspective accepts the notion that environmental factors act on or activate genetic or neurobiological predispositions. Culture is, in fact, the conceptual scaffolding of environmental circumstances in any human being's life (Hinton 1999).

## Research Agenda

Research on cultural issues related to the nomenclature of psychiatric entities and psychiatric diagnostic areas will also follow the two directions noted above. In this context, a number of areas can be identified to further the acceptability of DSM outside the United States:

### *Cultural Variants in Symptom Definition and Symptom Manifestations*

- Comparative research can be done on current major diagnostic categories aimed at confirming or dispelling the notion of categorical fallacies (assignment of Western-based nomenclatures or diagnostic criteria to clinical conditions observed in different cultures) in the diagnostic process, particularly among ethnic minorities within the United States (Kleinman 1988; Lewis-Fernandez and Kleinman 1995). These studies require comparisons of U.S. diagnostic practices with other developed and developing countries. A categorical fallacy, identified as such in any culture or society, thus becomes a hypothesis to be tested. One of the results of this type of research may be the indirect confirmation of core diagnostic criteria to be useful and usable across different cultures. In fact, there are some findings in the literature that confirm the eventual appli-

cability of agreed-on Western-based diagnostic criteria in different countries; they include the International Pilot Study of Schizophrenia (IPSS) (World Health Organization 1973) and different studies on DSM-based diagnostic criteria (Sartorius et al. 1980), confirmed also by efforts at making DSM-IV and ICD-10 generally comparable. The biggest objection to this approach is that the epidemiologic methodology and instruments used for these comparisons resort to an overly simplified lowest common denominator in the spelling out of diagnostic criteria. According to the critics, this eliminates the possibility of introducing unique cultural variables in the different countries or societies where the instrument is to be used (Rogler 1999). Translation and meaning-assignment issues are extremely important, as are specification of context and the clinician's cultural background.

- Complementary roles should be assigned to the relative contributions of genotype and environment (the latter including psychological and sociocultural factors) to psychiatric conditions (Abroms 1981). Perhaps, as Littlewood (1990) and more so Leff (1990) propose, we should attempt to explain (or understand) each psychiatric condition vis-à-vis a theoretical spectrum ranging from the biological to the sociocultural, and adding an estimation of the cultural distance between examiners and populations being studied, or between patient groups being compared. The magnitude of the cultural component's impact on each diagnostic category could be estimated following the parameters of DSM-IV's cultural formulation (Mezzich and Goode 1994). At the same time, the culturally determined vulnerability to stressors, and the treatability by social, sociocultural, or psychosociocultural means could be assessed. The assignment of a cultural profile to each given condition would subsequently take into account conventional social and cultural criteria, a general assessment of the DSM operational criteria for each category, and the overall experience of the clinician. Some of the clinical features thus included may reflect characteristics of the cultural group from which the patient comes, and so it would be incumbent on the clinician to sort them out (Leff's [1990] assessment of the "cultural distance") and assign to them a diagnostic, as well as a therapeutic value. An analysis of the "symptoms" from the perspectives provided by different ethnic and cultural groups, using instruments such as Weiss's Explanatory Model Interview Catalogue (EMIC) scale (Weiss et al. 1992) might prove helpful to the clinician in differentiating true clinical conditions from non-pathological, culturally determined behavior.
- The two bulleted sections immediately preceding can form the basis of studies on the cultural implications and relevance of key diagnostic criteria as presented in current nomenclatures, particularly in relation to

the assessment of severity from a cultural perspective. This parameter has demonstrated variability across cultures, and its study requires the elaboration of new instruments or the improvement of existing instruments. Clear distinctions between etic measures (evaluations or observations made by outsiders—e.g., by clinicians or researchers) and emic measures (evaluations from inside—i.e., by the subjects or members of the cultural groups themselves) can reduce assessor bias and enhance fairness in descriptions of culturally different persons. Prejudices induced by ignorance and buttressed by fear of the unknown minority persons may result in an unrealistic appraisal of their aspirations and motivations; therefore it is important to apply moderator variables in the assessment of minority persons, a point also argued by Neligh (1988) in relation to the Native American population and by Escobar et al. (1987) regarding Hispanic patients. In assessing instrument deficiencies, the cultural fairness of individual items must be considered. Choca et al. (1990) ascertained that the expert's assessments against which inventories are validated or evaluated could also contain biases: this introduces a logical circularity that only adds to the complexity of bias investigation. These researchers advocate the use of factor analysis in bias studies. This line of research is promising in that it would ensure specific validation of clinical diagnoses and may eventually provide more clear criteria for the initial assessment.

### *Anthropological Approaches*

The applicability and usefulness of anthropological research approaches have been underestimated in traditional clinical research in recent decades. This stance may change throughout, particularly in the diagnostic arena, due to the increasing prominence of cultural issues in clinical, therapeutic, regulatory, and policy-making circles.

- Research can be done on idioms of distress (e.g., extreme somatization) as possible symptomatic expressions of mental disorders in different cultures (Good 1994). The purpose of research in this area would be to delineate their special nature, meaning, and relevance to the culture in question, but also their potential value as diagnostic criteria in specific populations and regions of the world.
- Studies can be made of explanatory models of mental illness, which vary from culture to culture. Their study from both an anthropologico-cultural and a clinical perspective would help determine universally valid or culturally singular elements articulated within the etiopathogenesis of mental disorders (Alarcón 1995; Gaw 1993). Furthermore, the valid and

artifactual elements of these models would eventually serve as further diagnostic criteria or unique characteristics surrounding the core symptomatology of any psychiatric entity. For instance, the ascription of causality regarding catatonia to recent losses due to a natural disaster, or the report of hearing the voice of a recently deceased loved one calling the affected person's name may well point toward exploration of post-traumatic issues rather than the hasty assignment of a psychotic label and concurrent treatment decisions. The same applies to studies on the meaning of mental health and mental illness constructs across gender, ethnicity, and, particularly, religious and spiritual perspectives (Lukoff et al. 1995), where issues such as guilt, shame, identity, and social support affect diagnosis and treatment in significant ways: God's wrath used in different cultures (including Western groups) to explain clinical occurrences may open the way to otherwise hidden material relevant to the validity of any diagnosis.

- Research can be done on culture-specific syndromes—for example, *ataque de nervios* or *amok*—in different regions of the United States and in different parts of the world. The purpose of such research would be not only to assess the validity of these conditions but also to make advances in comparing them with existing clinical entities and to assess their eventual fitness (or lack of it) as components of any regular nomenclature (Littlewood 1990; Mezzich and Goode 1994). Research proposals in this area must address areas from linguistic issues (such as synonymy and grammar) to clinical context (such as level of emotionality and impact on individuals and groups). Repeated clinical assessments and interviews focusing on explanatory approaches will be useful. Models of this approach are offered by Guarnaccia and Rogler's (1999) study on *ataque de nervios* and Kleinman's (1980) exploration of neurasthenia in the Chinese population. Conversely, the expansion or applicability of the culture-specific syndrome concept to Western clinical entities such as anorexia nervosa or fibromyalgia (Gaines 1992; Guarnaccia and Rogler 1999) may help in the effort to homogenize, as much as possible, psychiatric nomenclature practices.

Well-coordinated efforts will only enrich the relevance of the obvious relationship between research on these items and core research issues in cultural psychiatry and culturally based diagnosis. Ultimately, the validity and potential use of DSM-V across different cultures may have to be examined and actually practiced in two dimensions or levels: first, the core symptoms of specific entities and their eventual or potential generalizability across the world, and second, the recognition of cultural specificities that could be considered either as associated conditions, second-layer diag-

nostic criteria, or specific cultural notations related to such diagnostic categories. This would involve projects on both retrospective evaluations or field trials of proposed criteria in multiple epidemiologic and clinical studies. It must be clear, however, that all research efforts should avoid reinforcing stereotyping tendencies, or narrowness of diagnostic criteria with exclusionary consequences. Rather, research on psychiatric nomenclature should move safely and deliberately away from these extremes.

## **Use of DSM-V in Nonpsychiatric Settings**

As greater emphasis is placed on detection and early intervention for mental disorders in settings other than traditional psychiatric clinics and practices, there is a need to define or operationalize diagnostic criteria in ways that can be rated or detected using methods other than the traditional psychiatric interview, which requires considerable training and clinical judgment. Reliance on clinical judgment could be minimized in a number of ways. First, criteria for mental disorders could be culled to remove items that cannot be determined reliably through patient self-reporting or through objectively observable signs or behaviors. Second, standardized self-report questionnaires or rating scales could be incorporated into diagnostic criteria (e.g., requiring a Beck Depression Inventory [BDI] [Beck et al. 1961] score of 16 or above) or used to make the syndrome diagnosis. Third, criteria could include requirements to use biological laboratory studies to confirm a diagnosis or to distinguish between disorders. To date, these three strategies have not been diagnostically definitive because of limitations in both specificity (e.g., high BDI scores are reported in some individuals without a depressive disorder, such as those experiencing a normal grief reaction) and sensitivity (e.g., normal brain magnetic resonance imaging is seen in many patients with schizophrenia). The diagnostic precision of such automated or objective diagnostic procedures may be inherently limited by the descriptive nature of mental disorders as etiology and underlying pathophysiology remain unknown.

The use of psychological testing, standardized rating scales, or medical laboratory examinations as explicit parts of DSM criteria has been largely avoided to date in recognition of the poor specificity of most available tests and to enable clinicians to make diagnoses with a minimum of instrumentation. With the exception of diagnoses involving mental retardation and learning disorders, mention of these more technically challenging assessments in DSM-IV is limited to the descriptive text, and such examinations are seen as ancillary and not diagnostic. However, as laboratory tests and psychological assessments evolve, their validity and reliability may surpass

those of the current criteria sets, which are based on clinical observation. Research on the extent to which psychometric scales and medical laboratory procedures can enhance current diagnostic criteria or can serve as a substitute for current criteria could have a particularly important impact on the detection and treatment of mental disorders in nonpsychiatric settings.

Issues related to diagnostic thresholds are particularly pertinent in nonspecialty settings. Patients treated in mental health settings represent only a more severely affected minority of those in the general community whose symptoms meet criteria for mental disorders (Regier et al. 1993). In contrast, patients in primary care settings with undiagnosed mental disorders are likely to be those with earlier or milder manifestations. Changes in diagnostic criteria could facilitate detection and treatment of mild or sub-threshold cases either through reductions in severity thresholds for selected disorders or through the development of alternative, simplified, less severe criteria sets specially designated for use in primary care and other nonspecialty settings.

### Laboratory Tests and Diagnosis

Use of laboratory tests may be particularly useful to facilitate detection of mental disorders in primary care medical settings, in which use of such tests for the diagnosis and management of general medical conditions is routine. As progress is made in identifying the underlying neuropathology and pathophysiology of mental disorders, incorporation of findings from blood tests or neuroimaging studies may provide a more objective and discriminating window into these pathological processes. At present, most candidate laboratory examinations, such as the dexamethasone suppression test for depression, are neither sensitive nor specific in discriminating between pathological and normal mental states or among different major classes of mental disorders (Frances et al. 1995). Although the sensitivity and specificity of many current diagnostic criteria are similarly limited, use of alternative laboratory procedures will require evidence of clear superiority to justify the added expense entailed. Development of definitive laboratory tests is a piecemeal process that will vary from disorder to disorder in relation to progress in uncovering etiology and pathological processes associated with each disorder. However, as pointed out by Widiger and Clark (2000), the current near-exclusion of laboratory findings from diagnostic criteria is both questionable and inconsistent, because definitive tests are currently available for selected disorders and are already used for others. For example, for the diagnosis of learning disorders and mental retardation, results of IQ testing are a key element of DSM-IV diagnostic criteria. By contrast, with sleep disorders, polysomnographic findings are not incor-



porated in DSM-IV despite their crucial role in making distinctions among subtypes of sleep disorders that cannot be ascertained from obtaining a medical history, mental status evaluation, or physical examination (American Sleep Disorders Association Polysomnography Task Force 1997). Notably, the criteria in the International Classification of Sleep Disorders (ICSD) (American Sleep Disorders Association 1990), developed by the American Sleep Disorders Association (Buysee et al. 1998), require polysomnographic testing for the diagnosis of sleep disorders. Therefore, the general exclusion of psychological assessments and laboratory findings from current diagnostic criteria should be reexamined in future revisions.

Because of the potentially widespread application and commercial potential for objective indicators of mental disorders, research in search of such indicators is likely to continue without special initiatives. However, too little attention is paid to potential improvements in diagnostic precision that can arise from research in understanding etiology and underlying neurobiological processes for mental disorders. Findings from neurobiological research can have profound and unexpected implications for the diagnostic nomenclature. For example, findings from genetics studies have suggested commonalities between the previously separate diagnoses of major depressive disorder and generalized anxiety disorder (Kendler et al. 1995), whereas findings from neuroimaging studies document a distinctly different pathophysiology underlying obsessive-compulsive disorder and other anxiety disorders that are currently grouped together. However, nosologic issues are seldom targeted in neurobiological research, for example, through the use of alternative systems for diagnosing the disorders being studied (e.g., ICD-10 vs. DSM-IV). Putting diagnostic questions into the neurobiological research agenda would add an important dimension to diagnostic validity that is absent for most mental disorders.

### Psychological Testing and Diagnosis

The use of standardized, psychometrically sound self-reported and computer-scored symptom rating scales may be particularly useful in nonspecialty settings for the detection of mental disorders. In comparison with a clinician interview to diagnose according to DSM-IV criteria, these tests offer advantages in reducing requirements for staff time and clinical judgment and in improving accurate reporting through such devices as use of multiple items to cover each diagnostic criterion, use of items that disguise the face validity of questions, and use of lie scales. In addition, most such scales yield a rating of symptom severity that can be used to determine treatment needs and to assess treatment response. Such scales have been developed for all major categories of DSM-IV mental disorders (American

Psychiatric Association 2000b). At present, results of psychological testing are not included in DSM-IV diagnostic criteria, with the exception of IQ testing and tests of academic skills to diagnose learning disorders and mental retardation. This exception points the way for research that could lead to incorporation of psychological test results as diagnostic criteria for other disorders. Determination of IQ through standardized testing offers a degree of diagnostic precision and accuracy in this area that cannot be achieved through routine clinical interview and physical examination. Although IQ tests have important limitations and are associated with social and ethical controversies (Halpern et al. 1996), the literature on reliability and validity of these tests far exceeds that for most other types of psychological assessments. For additional psychological tests to warrant incorporation into DSM diagnostic criteria, research is needed demonstrating substantial gains in reliability and validity when these are substituted for criteria based on routine clinical examination.

#### Development of Alternative Criteria for Primary Care and Nonspecialty Settings

To facilitate diagnosis of mild or subthreshold mental disorders in primary care settings, simplified or lower-threshold diagnostic criteria could be substituted for current systems or could be devised as an alternative official nomenclature designated for use outside of specialized mental health care settings. However, numerous costs would be associated with such a wholesale change in criteria, and such revisions should be made only in accordance with the considerations described above under "Rationale for Changing Criteria."

Diagnostic criteria need not be changed to manage diagnostic challenges presented in primary care and other nonspecialty settings. For example, existing and newly developed laboratory and psychological tests can facilitate screening, treatment planning, or diagnostic confirmation in nonspecialty settings without changing DSM categories or criteria. In fact, that is the current nondiagnostic role for examinations of this type. For example, the CAGE (Ewing 1984) questionnaire is often incorporated into routine medical screening to detect potential alcohol use disorders, and the detection of substances of abuse in urine or blood is a strong indicator of potential drug abuse, especially if use of these substances is denied on interview. Although they are useful in primary care medical settings, neither type of assessment offers sufficient advantages over current diagnostic criteria to warrant their incorporation into the section on psychoactive substance use disorders. Another strategy for adapting unchanged DSM criteria to be used in medical settings entails the development of simplified

criteria sets, such as the DSM-IV Primary Care Version (DSM-IV-PC) (American Psychiatric Association 1995), and questionnaires, such as the Primary Care Evaluation of Mental Disorders (PRIME-MD) (Spitzer et al. 1994). Alternatively, the challenge in improving psychiatric diagnosis in nonspecialty settings can be seen as primarily educational, and numerous training packages have been developed to enhance accurate diagnosis in primary care settings (e.g., Andrews and Hunt 1999).

## Research Agenda

- Put nomenclature issues on the neurobiological research agenda. To encourage investigators to focus on the nosologic implications of research on the neurobiology of mental disorders, supplemental grant funds could be offered to support the additional assessments and analyses entailed in validating alternative definitions of disorders or symptoms being evaluated. Review criteria should place high priority on the investigation of nosologic issues in requests for applications (RFAs) for studies of the neurobiological basis of mental disorders.
- Encourage research on automated or self-report methods to reduce reliance on clinical judgment. Self-reported diagnosis could be optimized through criterion-level research identifying and removing symptoms that cannot be reliably diagnosed through self-reporting. Subsequent research could evaluate the reliability and validity of alternative or new criterion sets composed entirely of items amenable to self-reporting. Another line of investigation could evaluate the impact on diagnostic reliability and validity of incorporating laboratory or psychological tests as criteria for mental disorders or as substitutes for assessing standard diagnostic criteria.

## Conclusions

Cross-cultural and cross-setting exportation of criteria developed principally in the United States by specially trained psychiatrists forces a reassessment of fundamental issues related to how mental disorders are defined and assessed. Research conducted on basic nomenclature issues can have scientific as well as political significance, because diagnostic categories and criteria that stand up across cultures and across settings are likely to represent core processes. The research agendas suggested here pertaining to ICD/DSM differences, cross-cultural applicability, and application in nonpsychiatric settings must have value independent of their pertinence to suggested revisions to be included in DSM-V. In fact, we propose a highly

conservative approach to the revision process and suggest that changes be made only when the empirical evidence or the need for change is compelling. Although much of the research proposed here may not produce definitive results in time for inclusion in DSM-V, the development of definitions of syndromes and criteria with universal applicability has implications that should affect future editions of the manual.

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