

The concept of mental disorder: diagnostic implications of the harmful dysfunction analysis

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What do we mean when we say that a mental condition is a medical disorder rather than a normal form of human suffering or a problem in living? The status of psychiatry as a medical discipline depends on a persuasive answer to this question. The answers tend to range from value accounts that see disorder as a sociopolitical concept, used for social control purposes, to scientific accounts that see the concept as strictly factual. I have proposed a hybrid account, the harmful dysfunction (HD) analysis, that incorporates both value and scientific components as essential elements of the medical concept of disorder, applying to both physical and mental conditions. According to the HD analysis, a condition is a disorder if it is negatively valued ("harmful") and it is in fact due to a failure of some internal mechanism to perform a function for which it was biologically designed (i.e., naturally selected). The implications of this analysis for the validity of symptom-based diagnostic criteria and for challenges in cross-cultural use of diagnostic criteria are explored, using a comparison of the application of DSM diagnostic criteria in the U.S. and Taiwan.

Key words: Psychopathology, diagnosis, nosology, philosophy of psychiatry, mental disorder, harmful dysfunction, cross-cultural diagnosis, validity of diagnostic criteria, false positives

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The concept of mental disorder is at the foundation of psychiatry as a medical discipline, at the heart of scholarly and public disputes about which mental conditions should be classified as pathological and which as normal suffering or problems of living, and has ramifications for psychiatric diagnosis, research, and policy. Although both normal and disordered conditions may warrant treatment, and although psychiatry arguably has other functions beyond the treatment of disorder, still there exists widespread concern that spurious attributions of disorder may be biasing prognosis and treatment selection, creating stigma, and even interfering with normal healing processes. However, no consensus exists on the meaning of "mental disorder". The upcoming revisions of the DSM-IV and ICD-10 offer an opportunity to confront these conceptual issues and improve the validity of psychiatric diagnosis.

I approach this problem via a conceptual analysis that asks: what do we mean when we say that a problematic mental condition, such as adolescent antisocial behavior, a child's defiant behavior toward a parent, intense sadness, intense worry, intense shyness, failure to learn to read, or heavy use of illicit drugs, is not merely a form of normal, albeit undesirable and painful, hu-

man functioning, but indicative of psychiatric disorder? The credibility and even the coherence of psychiatry as a medical discipline depends on there being a persuasive answer to this question. The answer requires an account of the concept of disorder that generally guides such judgments.

Among existing analyses of "mental disorder", a basic division is between value and scientific approaches. As Kendell put it: "The most fundamental issue, and also the most contentious one, is whether disease and illness are normative concepts based on value judgments, or whether they are value-free scientific terms; in other words, whether they are biomedical terms or sociopolitical ones" (1). I have proposed a hybrid account, the "harmful dysfunction" (HD) analysis of the concept of mental disorder (2-8). According to the HD analysis, a disorder is a *harmful dysfunction*, where "harmful" is a value term, referring to conditions judged negative by sociocultural standards, and "dysfunction" is a scientific factual term, referring to failure of biologically designed functioning. In modern science, "dysfunction" is ultimately anchored in evolutionary biology and refers to failure of an internal mechanism to perform one of its naturally selected functions.

In this article, I explore the consider-

able explanatory power of the HD analysis for understanding the distinction between mental disorder and other problematic mental conditions. I also illustrate the implications of the analysis for assessing the validity of DSM and ICD diagnostic criteria, and for understanding some of the conceptual challenges in applying diagnostic criteria across cultures, using the example of transplantation of DSM criteria to Taiwan.

WHY PSYCHIATRY CAN'T ESCAPE THE CONCEPT OF MENTAL DISORDER

The diagnostic criteria of the DSM and the ICD are currently the primary arbiters of what is disordered vs. nondisordered in most clinical practice and research. But they are clearly not conceptually final arbiters. The criteria are regularly revised to make them more valid in indicating disorder and to eliminate false positives, implicitly recognizing that "errors" in the criteria are possible. Moreover, both the popular press and critics within the mental health professions challenge the validity of the criteria in picking out mental disorder, and these disputes do not seem entirely arbitrary, but rather often seem to appeal to an underlying shared notion of disorder. In-

deed, professionals often classify conditions using the “not otherwise specified” category, which requires a sense of what is and is not a disorder independent of specific diagnostic criteria.

Granting the common observation that there is no “gold standard” laboratory test or physiological indicator for mental disorders and that current criteria are fallible, it might still be asked: why must we grapple with the elusive concept of disorder itself when there are so many empirical techniques for identifying disorders? The reality is that all of the tests that are commonly used to distinguish disorder from nondisorder rest on implicit assumptions about the concept of disorder; otherwise, it is not clear whether the test is distinguishing disorder from nondisorder, one disorder from another disorder, or one nondisordered condition from another. Common tests of validity such as statistical deviance, family history/genetic loading, predictive validity, Kendell’s discontinuity of distribution, factor analytic validity, construct validity, syndromal co-occurrence of symptoms, response to medication, Robins and Guze criteria, Meehl’s taxometric analysis, and all other such guides can identify a valid construct and separate one such construct from another. But whether the distinguished constructs are disorder versus nondisorder goes beyond the test’s capabilities. Every such test is equally satisfied by myriad normal as well as disordered conditions. Even the currently popular (in the U.S.) use of role impairment does not inherently distinguish disorder from nondisorder (and for this reason is generally avoided by the ICD), because there are many normal conditions, from sleep and fatigue to grief and terror, that not only impair routine role functioning but are biologically designed to do so. It only *seems* as though these various kinds of empirical criteria provide a stand-alone standard for disorder, because they are used within a context in which disorders – in some background conceptual sense – are already implicitly and independently inferred to exist, and the issue is simply to distinguish among disorders or to distinguish disorder from normality. This essential

background assumption itself depends on the concept of disorder being deployed independently of the specific empirical test. Thus, there is no substitute for the concept of mental disorder as the ultimate standard. None of our empirical approaches work without a warrant in a conceptual analysis of disorder.

A further reason why we must rely on the concept of disorder is the lack of definitive etiological understanding of mental disorder and the consequent theoretical fragmentation of psychiatry, and thus the decision in the DSM and the ICD to provide theory-neutral criteria for diagnosing disorders. Etiological theory (e.g., return of the repressed, irrational ideas, serotonin deficit) would generally provide ways to distinguish disorder from nondisorder in a more developed science. The need to rely for now on theory-neutral criteria means that the concept of disorder itself, which is to some extent shared by various theories, offers the best way of judging whether a theory-neutral diagnostic criteria set picks out disorders rather than normal conditions (i.e., is *conceptually valid*) (2). Theory-neutral criteria work to the extent that they adhere to an implicit understanding of disorder versus nondisorder that is shared across most theoretical perspectives and allows a provisional basis for shared identification of disorders for research purposes.

ASSUMPTIONS UNDERLYING THE ANALYSIS OF MENTAL DISORDER

The HD analysis departs from two observations: first, the concept of “disorder” has been around in physical medicine and applied to some mental conditions for millennia and is broadly understood by lay people and professionals; and, second, a central goal of an analysis of “mental disorder” is to clarify and reveal the degree of legitimacy in psychiatry’s claims to be a truly medical discipline rather than, as antipsychiatrists and others have claimed, a social control institution masquerading as a medical discipline. The approach to defining

“mental disorder” that seems most relevant to the latter goal is a conceptual analysis of the existing meaning of “disorder” as it is generally understood in medicine and society in general, with a focus on whether and how this concept applies to the mental domain. The claim of psychiatry to be a medical discipline depends on there being genuine mental disorders in the same sense of “disorder” that is used in physical medicine. Any proposal to define “mental disorder” in a way unique to psychiatry that does not fall under the broader medical concept of disorder would fail to address this issue. Part of the challenge in resolving this issue is that the medical concept of disorder is itself subject to ongoing dispute. The HD analysis is aimed at addressing this challenge.

Because the analysis here ultimately concerns the general concept of disorder as applied to both mental and physical conditions, examples from both mental and physical domains are used to test the analysis. I use “internal mechanism” as a general term to refer both to physical structures and organs as well as to mental structures and dispositions, such as motivational, cognitive, affective, and perceptual mechanisms. Some writers distinguish between “disorder”, “disease”, and “illness”; I focus on “disorder” as the broader term that covers both traumatic injuries and diseases/illnesses, thus being closer to the overall concept of medical pathology.

I focus on the question of what makes a mental condition a disorder; I do not address how to delineate mental versus physical disorders. For present purposes, mental processes are simply those like emotion, thought, perception, motivation, language, and intentional action. There is no intended Cartesian implication about any special ontological status of the mental; it is just an identified set of functions and processes.

THE VALUE COMPONENT OF “DISORDER”

As traditional value accounts suggest, a condition is a mental disorder only if it is harmful according to social values and

thus at least potentially warrants medical attention. Medicine in general, and psychiatry in particular, are irrevocably value-based professions. "Harm" is construed broadly here to include all negative conditions.

Both lay and professional classificatory behaviors demonstrate that the concept of mental disorder contains a value component. For example, inability to learn to read due to a dysfunction in the corpus callosum (assuming that this theory of some forms of dyslexia is correct) is harmful in literate societies, but not harmful in preliterate societies, where reading is not a skill that is taught or valued, and thus not a disorder in those societies. Most people have what physicians call "benign anomalies", that is, minor malformations that are the result of genetic or developmental errors but that cause no significant problem, and such anomalies are not considered disorders. For example, benign angiomas are small blood vessels whose growth has gone awry, leading them to connect to the skin, but, because they are not harmful, they are not considered disorders. The requirement that there be harm also accounts for why simple albinism, heart position reversal, and fused toes are not generally considered disorders, even though each results from an abnormal breakdown in the way some mechanism is designed to function. Purely scientific accounts of "disorder", even those based on evolutionary function as is the analysis below (9-11), fail to address this value component.

In the DSM and ICD diagnostic criteria, the symptoms and clinical significance requirement generally ensure harm and that the condition is negatively valued. The dispute remains about whether "mental disorder" is purely evaluative or contains a significant factual component that can discriminate a potential domain of negative conditions that are disorders from those that are nondisorders.

There are many negative conditions that are not disorders, and many of them contain symptoms and are clinically significant in that they cause distress or role impairment (e.g., grief). The distinction between disorders and nondisorders

thus seems to depend on some further criterion.

THE FACTUAL COMPONENT OF "DISORDER"

Contrary to those who maintain that a mental disorder is simply a socially disapproved mental condition (12,13), "mental disorder" as commonly used is just one category of the many negative mental conditions that can afflict a person. One needs an additional factual component to distinguish disorders from the many other negative mental conditions not considered disorders, such as ignorance, lack of skill, lack of talent, low intelligence, illiteracy, criminality, bad manners, foolishness, and moral weakness.

Indeed, both professionals and laypersons distinguish between quite similar negative conditions as disorders versus nondisorders. For example, illiteracy is not in itself considered a disorder, even though it is disvalued and harmful in our society, but a similar condition that is believed to be due to lack of ability to learn to read because of some internal neurological flaw or psychological inhibition is considered a disorder. Male inclinations to aggressiveness and inclination to sexual infidelity are considered negative but not generally considered disorders because they are seen as the result of natural functioning, although similar compulsive motivational conditions are seen as disorders. Grief is seen as normal, whereas similarly intense sadness not triggered by real loss is seen as disordered. A pure value account of "disorder" does not explain such distinctions among negative conditions.

Moreover, we often adjust our views of disorder based on cross-cultural evidence that may go against our values. For example, U.S. culture does not value polygamy, but we judge that it is not a failure of natural functioning, thus not disordered, based partly on cross-cultural data.

The challenge, then, is to elucidate the factual component. Based on common usage in the literature, I call this factual component a "dysfunction". What, then,

is a dysfunction? An obvious place to begin is with the supposition that a dysfunction implies an unfulfilled function, that is, a failure of some mechanism in the organism to perform its function. However, not all uses of "function" and "dysfunction" are relevant. The medically relevant sense of "dysfunction" is clearly *not* the colloquial sense in which the term refers to failure of an individual to perform well in a social role or in a given environment, as in assertions like "I'm in a dysfunctional relationship" or "discomfort with hierarchical power structures is dysfunctional in today's corporate environment". These kinds of problems need not be individual disorders. A disorder is different from a failure to function in a socially or personally preferred manner precisely because a dysfunction exists only when something has gone wrong with functioning, so that a mechanism cannot perform as it is naturally (i.e., independently of human intentions) supposed to perform.

Presumably, then, the functions that are relevant are "natural functions", about which concept there is a large literature (12-27). Such functions are frequently attributed to inferred mental mechanisms that may remain to be identified, and failures labeled dysfunctions. For example, a natural function of the perceptual apparatus is to convey roughly accurate information about the immediate environment, so gross hallucinations indicate dysfunction. Some cognitive mechanisms have the function of providing the person with the capacity for a degree of rationality as expressed in deductive, inductive, and means-end reasoning, so it is a dysfunction when the capacity for such reasoning breaks down, as in severe psychotic states.

The function of a mechanism is important because of its distinctive form of explanatory power; the existence and structure of the mechanism is explained by reference to the mechanism's effects. For example, the heart's effect of pumping the blood is also part of the heart's explanation, in that one can legitimately answer a question like "why do we have hearts?" or "why do hearts exist?" with "because hearts pump the blood". The effect of pumping the blood also

enters into explanations of the detailed structure and activity of the heart. Talk of “design” and “purpose” in the case of naturally occurring mechanisms is just a metaphorical way of referring to this unique explanatory property that the effects of a mechanism explain the mechanism. So, “natural function” can be analyzed as follows: *a natural function of an organ or other mechanism is an effect of the organ or mechanism that enters into an explanation of the existence, structure, or activity of the organ or mechanism.* A “dysfunction” exists when an internal mechanism is unable to perform one of its natural functions (this is only a first approximation to a full analysis; there are additional issues in the analysis of “function” that cannot be dealt with here (8,21,24)).

The above analysis applies equally well to the natural functions of mental mechanisms. Like artifacts and organs, mental mechanisms, such as cognitive, linguistic, perceptual, affective, and motivational mechanisms, have such strikingly beneficial effects and depend on such complex and harmonious interactions that the effects cannot be entirely accidental. Thus, functional explanations of mental mechanisms are sometimes justified by what we know about how people manage to survive and reproduce. For example, a function of linguistic mechanisms is to provide a capacity for communication, a function of the fear response is to avoid danger, and a function of tiredness is to bring about rest and sleep. These functional explanations yield ascriptions of dysfunctions when respective mechanisms fail to perform their functions, as in aphasia, phobia, and insomnia, respectively.

“Dysfunction” is thus a purely factual scientific concept. However, discovering what in fact is natural or dysfunctional (and thus what is disordered) may be difficult and may be subject to scientific controversy, especially with respect to mental mechanisms, about which we are still largely ignorant. This ignorance is part of the reason for the high degree of confusion and controversy concerning which conditions are really mental disorders. However, functional explanations can be plausible

and useful even when little is known about the actual nature of a mechanism or even about the nature of a function. For example, we know little about the mechanisms underlying sleep, and little about the functions of sleep, but circumstantial evidence persuades us that sleep is a normal, biologically designed phenomenon and not (despite the fact that it incapacitates us for roughly one-third of our lives) a disorder; the circumstantial evidence enables us to distinguish some normal versus disordered conditions related to sleep despite our ignorance.

Obviously, one can go wrong in such explanatory attempts; what seems non-accidental may turn out to be accidental. Moreover, cultural preconceptions may easily influence one’s judgment about what is biologically natural. But, often one is right, and one is making a factual claim that can be defeated by evidence. Functional explanatory hypotheses communicate complex knowledge that may not be so easily and efficiently communicated in any other way.

Today, evolutionary theory provides the best explanation of how a mechanism’s effects can explain the mechanism’s presence and structure. In brief, those mechanisms that had effects on the organism that contributed to the organism’s reproductive success over enough generations thereby increased in frequency and hence were “naturally selected” and exist in today’s organisms. Thus, an explanation of a mechanism in terms of its natural function may be considered a roundabout way of referring to a causal explanation in terms of natural selection. Since natural selection is the only known means by which an effect can explain a naturally occurring mechanism that provides it, evolutionary explanations presumably underlie all correct ascriptions of natural functions. Consequently, an evolutionary approach to mental functioning (7,24) is central to an understanding of psychopathology.

One might object that what goes wrong in disorders is sometimes a social function that has nothing to do with natural, universal categories. For example, reading disorders seem to be failures of a social function, because there

is nothing natural or designed about reading. However, illiteracy involves the very same kind of harm as reading disorder, yet it is not considered a disorder. Inability to read is only considered indicative of disorder when circumstances suggest that the reason for the inability lies in a failure of some brain or psychological mechanism to perform its natural function. There are many failures of individuals to fulfill social functions, and they are not considered disorders unless they are attributed to a failed natural function.

If one looks down the list of disorders in the DSM, it is apparent that by and large it is a list of the various ways that something can go wrong with the seemingly designed features of the mind. Very roughly, psychotic disorders involve failures of thought processes to work as designed; anxiety disorders involve failures of anxiety- and fear-generating mechanisms to work as designed; depressive disorders involve failures of sadness and loss-response regulating mechanisms; disruptive behavior disorders of children involve failures of socialization processes and processes underlying conscience and social cooperation; sleep disorders involve failure of sleep processes to function properly; sexual dysfunctions involve failures of various mechanisms involved in sexual motivation and response; eating disorders involve failures of appetitive mechanisms, and so on. There is a certain amount of nonsense in the DSM and criteria are often overly inclusive. However, the vast majority of categories are inspired by conditions that even a lay person would correctly recognize as a failure of designed functioning.

When we distinguish normal grief from pathological depression, or normal delinquent behavior from conduct disorder, or normal criminality from antisocial personality disorder, or normal unhappiness from adjustment disorder, or illiteracy from reading disorder, we are implicitly using the “failure-of-designed-function” criterion. All of these conditions – normal and abnormal – are disvalued and harmful conditions, and the effects of the normal and pathological conditions can be quite similar behav-

iorally, yet some are considered pathological and some not. The natural-function criterion explains these distinctions.

It bears emphasis that even biological conditions that are harmful in the current environment are not considered disorders if they are considered designed features. For example, the taste preference for fat is not considered a disorder, even though in today's food-rich environment it may kill you, because it is considered a designed feature that helped us to obtain needed calories in a previous food-scarce environment. Higher average male aggressiveness is not considered a mass disorder of men even though in today's society it is arguably harmful, because it is considered the way men are designed (of course, there are aggressiveness disorders; here as elsewhere, individuals may have disordered responses of designed features).

In sum, a mental disorder is a harmful mental dysfunction. If the HD analysis is correct, then a society's categories of mental disorder offer two pieces of information. First, they indicate a value judgment that the society considers the condition negative or harmful. Second, they make the factual claim that the harm is due to a failure of the mind to work as designed; this claim may be correct or incorrect, but in any event reveals what the society thinks about the natural or designed working of the human mind.

IMPLICATIONS OF THE HD ANALYSIS FOR VALIDITY OF DIAGNOSTIC CRITERIA

One of the disadvantages of pure social-constructivist views of mental disorder, like antipsychiatric views, is that they offer no place to stand from which to critique current diagnostic criteria and to improve their validity. Once one has a conceptual analysis of disorder that offers a "place to stand" in evaluating whether diagnostic criteria identify disorders, one can consider whether current criteria get the intended distinction right. A distinction central to an adequate assessment is whether the client's

problem is a mental disorder or a problem in living that involves a normal though problematic reaction to stressful environmental conditions. The way we think about a case may influence the treatment we think most appropriate, so that, for example, thinking of a client's condition as a mental disorder tends to suggest that something is wrong internally and that the locus of intervention should be the client's mental functioning rather than the client's relationship to the environment. There are many other potentially harmful effects of such misclassification as well, ranging from stigma to confusing research results about etiology and treatment when disordered and nondisordered clients are mixed together.

The international use of DSM-style symptom-based criteria to diagnose mental disorder raises two basic challenges. The first is that symptom-based criteria themselves, even as used within the U.S., fail to take context into account and thus fail to adequately identify conditions due to dysfunctions. Criteria are consequently often too broad and incorrectly include normal reactions under the "disorder" category. Here are three brief examples from earlier work of mine (6,28).

Major depressive disorder

The DSM-IV criteria for major depressive disorder contain an exclusion for uncomplicated bereavement (up to two months of symptoms after loss of a loved one are allowed as normal) but no exclusions for equally normal reactions to other major losses, such as a terminal medical diagnosis in oneself or a loved one, separation from one's spouse, the end of an intense love affair, or loss of one's job and retirement fund. Reactions to such losses may satisfy DSM-IV diagnostic criteria but are not necessarily disorders. If one's reaction to such a loss includes, for example, just two weeks of depressed mood, diminished pleasure in usual activities, insomnia, fatigue, and diminished ability to concentrate on work tasks, then one's reaction satisfies DSM-IV criteria

for major depressive disorder, even though such a reaction need not imply pathology any more than it does in bereavement. Clearly, the essential requirement that there be a dysfunction in a depressive disorder – perhaps one in which loss-response mechanisms are not responding proportionately to loss as designed – is not adequately captured by DSM-IV criteria (29,30).

Because of these flaws, the epidemiological data on prevalence of depression can be misleading, yielding potentially inflated estimates of the social and economic costs of depression. Based on international epidemiological studies using symptom-based criteria, the World Health Organization (WHO) has publicized the apparently immense costs of depression. However, the claimed enormity of this burden relative to other serious diseases, and the consequent influence on priorities, may result from the failure to distinguish depressive disorders from normal sadness. The WHO calculations of disease burden are extremely complex, but arise from two basic components: the number of people who suffer from a condition and the amount of disability and premature death the condition causes. The first component of burden, the frequency of the condition, derives from symptom-based definitions that estimate that 9.5% of women and 5.8% of men suffer from depression in a 1-year period. The second component, disability, is ordered into seven classes of increasing severity, stemming from the amount of time lived with a disease weighted by the severity of the disease. The severity scores come from consensual judgments of health workers from around the world that are applied to all cases of the disease. Depression is placed in the second most severe category of illness, behind only extremely disabling and unremitting conditions such as active psychosis, dementia, and quadriplegia, and is considered comparable to the conditions of paraplegia and blindness. This extreme degree of severity assumes that all cases of depression share the depth, chronicity, and recurrence that are characteristic of the severe conditions that health workers see in their practices. But,

the epidemiological studies encompass everyone who meets symptom criteria, a group that, due to the possible confounding of normal sadness with disorder, may be heterogeneous to a greater degree than clinical patients would indicate, yielding an invalid overall estimation of disease burden. Unraveling these confusions could lead to a more optimal distribution of WHO's health resources.

Conduct disorder

The DSM-IV diagnostic criteria for conduct disorder allow the diagnosis of adolescents as disordered who are responding with antisocial behavior to peer pressure, threatening environment, or abuses at home (31). For example, if a girl, attempting to avoid escalating sexual abuse by her stepfather, lies to her parents about her whereabouts and often stays out late at night despite their prohibitions, and then, tired during the day, often skips school, and her academic functioning is consequently impaired, she can be diagnosed as conduct disordered. Rebellious kids or kids who fall in with the wrong crowd and who skip school and repetitively engage in shoplifting and vandalism also qualify for diagnosis. However, in an acknowledgment of such problems, there is a paragraph included in the "Specific culture, age, and gender features" section of the DSM-IV text for conduct disorder which states that "consistent with the DSM-IV definition of mental disorder, the conduct disorder diagnosis should be applied only when the behavior in question is symptomatic of an underlying dysfunction within the individual and not simply a reaction to the immediate social context". If these ideas had been incorporated into the diagnostic criteria, many false positives could have been eliminated. Unfortunately, in epidemiological and research contexts, such textual nuances are likely ignored.

Social phobia

Whereas social phobia is a real dis-

order in which people can sometimes not engage in the most routine social interaction, current criteria allow diagnosis when someone is, say, intensely anxious about public speaking in front of strangers. But, it remains unclear whether such fear is really a failure of normal functioning or rather an expression of normal range danger signals that were adaptive in the past, when failure in such situations could lead to ejection from the group and a consequent threat to survival. This diagnosis seems potentially an expression of American society's high need for people who can engage in occupations that require communicating to large groups (32,33).

IMPLICATIONS OF THE HD ANALYSIS FOR CROSS-CULTURAL USE OF DIAGNOSTIC CRITERIA

A second problem that arises in the use of symptom-based diagnostic criteria is specific to the international context: due to local cultural conditions, the symptomatic expression of a dysfunction, or the symptomatic indicators of dysfunction versus normality, or the values that determine that a condition is negative, may vary for a great number of reasons. To illustrate this problem, I return to each of the above diagnostic categories and suggest how additional problems might occur in using the DSM criteria for these disorders in the context of Taiwanese society.

Depression

The classic finding is that Asian populations express their depression through an "idiom of distress" that focuses on somatic complaints rather than more mental DSM symptoms (34,35). This poses a challenge in applying DSM criteria. However, the data suggest that, if asked, Asian populations do often report the DSM-type symptoms as well, so that this may be an issue of self-presentation rather than actual variation in the symptomatic expression of a dysfunction. Another issue concerns gender expectations: in Taiwan (especially among

older generations), even more than in the U.S., the woman is expected to have primary responsibility for the home, which can be constraining. Folk understanding of female versus male nature tends to allow for a large amount of normal expression of depressive-like misery expressed by women as part of their "natural" life situation and innate tendencies. Different expectations apply to males. Thus, especially in applying DSM criteria to some older women, there might be a challenge in deciding whether the symptoms indicate a disorder (as they might in the U.S.) or are just a culturally sanctioned normal response to difficult circumstances.

Conduct disorder

In Taiwanese society, expectations and supervision of some children and adolescents appear to be more demanding and more rigid than in the U.S.. In some cases, this is because of the academic testing system, in which a youth's entire future may depend on his or her performance on a single test. These factors could affect the interpretation of antisocial behavior in several ways. For example, early misbehavior could more frequently be a normal response to excessive family pressure. On the other hand, some children may not express inherent antisocial tendencies until a later age than would be typical in U.S., because of the greater constraints of the Taiwanese cultural environment. It is also possible that Taiwanese hold a culturally implicit theory of adolescent development that is less accepting of youthful misbehavior as normal than is the American implicit theory, leading to overpathologization.

Social phobia

DSM-IV criteria for social phobia require anxiety only about social interactions with unfamiliar people. One can be perfectly comfortable with one's family and with those one knows, but still be diagnosed with social phobia if he feels anxious in certain situations with

strangers (e.g., public speaking). There may be a strong cultural loading here that poses challenges for the Taiwanese diagnostician. These criteria are influenced by American culture's belief in individuality, independence from family, and open interactions of unfamiliar. In contrast, some Taiwanese, at least of older generations, may have been socialized to think primarily of the family as a safe haven and to see unfamiliar people as requiring more caution. The DSM-IV criteria may potentially pathologize what might be considered normal among Taiwanese given local socialization. It should be emphasized that these observations may apply more to older Taiwanese.

As these examples suggest, the HD analysis allows much room for cross-cultural variation in diagnosis due to many nuanced sources not limited to culture-specific syndromes. However, the HD analysis also reflects the reality that cultures, whatever their values, cannot construct disorders from whole cloth; a culture is only correct in labeling a condition it considers undesirable as a disorder if the condition involves a failure of biologically designed functioning. Thus, cultures can be wrong about whether a condition is a disorder or normal, as Victorian physicians were wrong to think that clitoral orgasm was a disorder, ante-bellum confederate U.S. physicians were wrong to think that slaves who ran away from their slavery were disordered, and some cultures in which schistosomiasis is endemic are wrong to think that its symptoms are part of normal functioning.

CONCLUSIONS

Careful attention to the concept of mental disorder that underlies psychiatry suggests that, contrary to various critics, there is indeed a coherent medical concept of mental disorder in which "disorder" is used precisely as it is in physical medicine. Once this concept is made explicit, it offers a "place to stand" in evaluating whether current symptom-based DSM and ICD diagnostic criteria are accomplishing their goal of identify-

ing psychiatric disorders as opposed to normal problematic mental conditions. I have argued that there is a long way to go in this regard. I suggest that the upcoming revisions of both manuals create a formal mechanism for reviewing each diagnostic criteria set for possible conceptual flaws leading to false positives, so that psychiatric diagnosis need not be afflicted by manifest weaknesses that are apparent to the press and the lay public yet go ignored by the profession.

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