

chiatric Association requested the formation of a Scientific Review Committee which, building on the previously proposed criteria, further developed them in a conscious attempt to move the process from an “empirically aided expert consensus” model to a more empirically driven process in which the focus would shift from personal expert opinion to systematic review of research evidence for validity and reliability⁸.

This is a very challenging process, and will never be as simple as the evaluation of efficacy of a drug treatment, which can focus largely on results from randomized controlled trials and reports of side effects. What we see in the DSM-US based psychiatric nosologic process is a gradual shift from an expert consensus to a more data-driven decision making, in line with the developments of the broader medical field⁹.

I am convinced that a move toward eti-

ological diagnoses in psychiatry will result from incremental advances, not one dramatic change. The DSM-5 already contains an etiologic diagnostic criterion for narcolepsy – evidence for a hypocretin deficiency. In the coming years, if genetic risk factors (e.g., polygenic risk scores) or imaging findings can add to the diagnostic validity or reliability of specific diagnostic categories, then they can be added with the usual diagnostic review process. Eventually, psychiatric diagnostic criteria may come to resemble those seen in other areas of medicine, for example, rheumatology, where the operationalized criteria are a mix of symptoms, signs, course of illness, and specific biological findings.

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1. Stein D, Shoptaw S, Vigo D et al. *World Psychiatry* 2022;21:393-414.
2. Kendler KS, Tabb K, Wright J. *Am J Psychiatry* 2022; 179:329-35.
3. Sullivan PF, Agrawal A, Bulik CM et al. *Am J Psychiatry* 2018;175:15-27.
4. Trubetskoy V, Pardiñas AF, Qi T et al. *Nature* 2022; 604:502-8.
5. Singh T, Poterba T, Curtis D et al. *Nature* 2022; 604:509-16.
6. Kendler KS, Munoz RA, Murphy G. *Am J Psychiatry* 2010;167:134-42.
7. Zachar P, Regier DA, Kendler KS. *J Nerv Ment Dis* 2019;207:778-84.
8. Kendler KS. *Psychol Med* 2013;43:1793-800.
9. Solomon M. *Making medical knowledge*. New York: Oxford University Press, 2015.

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Incremental integration of nosological innovations is improving psychiatric diagnosis and treatment

Stein et al¹ present a perspective on the many forms of ferment and creative activity in contemporary psychiatric research and scholarship. Their paper articulates an appealing basic stance toward these developments: rather than calling for a revolution or paradigm shift to realize the clinical applications of recent research advances, their view is that such advances can be integrated incrementally. The breadth and scope of the paper is indeed impressive, covering numerous generally insular literatures, and successfully articulating a truly international perspective on developments in psychiatric research and practice.

A focus on incremental integration provides an appealing stance, because paradigmatic disruption can be difficult to navigate in an ongoing enterprise such as psychiatric care. As Hyman points out², it can be difficult “to repair a plane while it is flying”. Many contemporary scholars call for fundamental shifts in psychiatric thinking, but, as we incorporate novel approaches, we must still attend to the structures in which current care is embedded. This is because ongoing

patient care depends on those extant structures.

Although the basic stance of incremental advances has pragmatic appeal, there are also some aspects of the arguments offered by Stein et al that may benefit from further thought and discussion. Specifically, their stance involves defining a threshold for the distinction between “incremental integration” and “paradigm shift”. The basic concern voiced by the authors is that paradigm shifts are disruptive and therefore problematic and suboptimal, whereas incremental integration is desirable and of course part and parcel of the history of medicine. But how should we distinguish between incremental integration and disruptive paradigm shifts, in incorporating novel evidence and approaches?

My impression is that constructive evolution in the field is happening within normal channels, thereby suggesting that important improvements do not require disruptive paradigm shifts. Moreover, this type of progression is obviously necessary if the goal of psychiatry is to base practice on research. This is because research aims

to challenge tradition by its very nature as a creative and forward-thinking enterprise. Impactful medical research strives toward continuously improved understanding of the world, with direct implications for patient care.

Consider for example the assertion that “categorical and dimensional approaches are interchangeable: any dimension can be converted into a category, and any category can be converted into a dimension”¹. This statement, although appealingly ecumenical, may be scientifically misleading. Fortunately, the burgeoning literature comparing categorical and dimensional approaches directly is impacting psychiatry not through disruption, but via the normal interdigitation of science and practice.

Categorical and dimensional models are routinely contrasted and compared directly in their ability to account for data, and these direct empirical comparisons help to distinguish various conceptions of psychiatric signs and symptoms. There is a vast literature on this topic and, when such comparisons are undertaken, dimensional models tend to fit data better than cate-

gorical ones³⁻⁵.

This body of evidence is shaping psychiatric thinking not via disruptive paradigm shifts, but through incremental integration. One area where this is abundantly evident is that of personality disorders (PDs). Few sections of classical diagnostic manuals have proven as problematic as that on PDs, because the vexing conceptual problems of comorbidity and within-category heterogeneity are particularly acute when conceptualizing cases in terms of classical PD categories⁶. As noted by Stein et al, “when it comes to, say, personality disorders, the disease-entity concept is even more distant, and the search for new approaches is seen as particularly key”.

For these reasons, contemporary PD models in diagnostic manuals are transitioning to dimensional approaches. For example, the ICD-11 model is based on the empirical dimensional structure of PD variation, and is now officially in use⁷. Is this an example of a paradigm shift, or of incremental integration? Inasmuch as research influenced the structure of the evolving and established ICD nosological endeavor (vs. dispensing with the ICD altogether), this provides a compelling example of a much needed and welcome incremental integration. The general point is that progress does not require disruption in all instances; existing structures and mechanisms (such as the ICD revision endeavor) can often support constructive forms of progress.

Importantly, whether such progress is seen as paradigm shifting or as incremental integration may be in the eye of the beholder. For example, to maintain conformity with the international psychiatric community, the DSM’s approach to PDs will need to shift toward the ICD-11 ap-

proach, which is highly similar to the DSM-5 alternative model of PDs (as opposed to the DSM-5 PD categories reprinted from DSM-IV in the categorical diagnostic section of the manual). Whether this inevitable evolution is perceived as disruptive or as incremental will depend on the perspectives of the scholars contemplating these changes. Nevertheless, the general point is that PD nosology is shifting based on evidence, within the pages of stalwart diagnostic manuals. Progress is being incrementally integrated through normal channels and is achieved without needing to dispense entirely with the ICD and DSM. Indeed, to maintain scientific viability, the ICD and DSM will need to continue to integrate dimensionality more thoroughly and not just for PDs, given the state of the extensive literature on empirical classification of psychopathology⁸.

Innovations in PD classification are also beginning to impact thinking about effective approaches to intervention, through incremental integration. Sauer-Zavala et al⁹ provide a compelling example of framing such approaches as transitional, via modules aimed at unpacking heterogeneity in the classical category of borderline PD. Rather than reifying this category, they embrace the heterogeneity of presentations within it, by parsing it in terms of modern dimensional approaches. They show that borderline PD heterogeneity can be effectively conceptualized by tailoring interventions to specific dimensional sub-elements, shifting treatment to more directly address the features delineated in the DSM-5 alternative model (e.g., tailoring treatment for more antagonistic vs. more disinhibited presentations). This type of perspective shows that innovation can make its way into front-line practice not by demanding

abandonment of classical diagnostic labels, but by showing how modern dimensional research can help to improve case conceptualization, focusing interventions on specific presentations.

In sum, Stein et al are to be commended on a thorough and forward-thinking review of the numerous developments at the cutting edge of psychiatric research and practice. Their call to incorporate these advances is indeed welcome. Nevertheless, whether the incorporation of advances is seen as disruptive as opposed to integrative is often tied to the perspective of the observer, and the previous investments and traditions embraced by that observer. The good news is that many creative and novel ideas from the research realm are making their way into practice through normal channels, even if some are afraid that innovation may be unnecessarily disruptive.

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1. Stein DJ, Shoptaw SJ, Vigo D et al. *World Psychiatry* 2022;21:393-414.
2. Hyman SE. *J Child Psychol Psychiatry* 2011;52:661-75.
3. Haslam N, McGrath MJ, Viechtbauer W et al. *Psychol Med* 2020;50:1418-32.
4. Kotov R, Jonas KG, Carpenter WT et al. *World Psychiatry* 2020;19:151-72.
5. Krueger RF, Hobbs KA, Conway CC et al. *World Psychiatry* 2021;20:171-93.
6. Skodol AE, Morey LC, Bender DS et al. *Am J Psychiatry* 2015;172:606-13.
7. World Health Organization. International classification of diseases, 11th revision. <https://icd.who.int>.
8. Kotov R, Cicero DC, Conway CC et al. *Psychol Med* 2022; doi: 10.1017/S0033291722001301.
9. Sauer-Zavala S, Southward MW, Hood CO et al. *Personal Disord* 2022; doi: 10.1037/per0000520.

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The future of CBT and evidence-based psychotherapies is promising

Stein et al¹ point out that, while evidence-based psychotherapies and particularly cognitive behavioral therapy (CBT) represent a “remarkable step forward”, their implementation in mental health systems globally is “arguably best conceptualized as representing incremental progress”.

Modest implementation is tied to several factors, including incompatibility with other psychotherapeutic models, frequent departure from evidence-based guidelines in routine care, and lack of trained clinicians. Further, even with embedded training in evidence-based therapies, as exemplified

by the UK Improving Access to Psychological Therapies (IAPT) program, the authors report that rates of clinically significant improvement are estimated at only 26% when assuming poor treatment response among dropouts¹.

In line with 2004 modeling to suggest