Toward a clinically useful and empirically based dimensional model of psychopathology

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In his target essay, Westen argues convincingly for moving from a criterion-based system for psychiatric diagnosis, to a system based on prototypes. There is much to admire in Westen's essay, and many points with which we can readily agree. The polythetic-categorical approach to diagnosis that frames modern DSMs was critical in the *zeitgeist* in which it was developed, but, as Weston eloquently describes, its limitations and conceptual conundrums are now well documented. We are therefore in complete agreement with Westen's overarching point: new approaches to conceptualizing psychiatric disorders are needed. In the remainder of this brief commentary, we note some areas where our approach might be somewhat different from Westen's, with the idea in mind of furthering discussion of these issues, and working collaboratively toward a novel and empirically-based psychiatric nosology.

Westen relies heavily on clinician report as the primary source of data to delineate empirically-based psychopathology constructs. Westen acknowledges this reliance on clinician reporters as a potential limitation of his prototype approach, but we believe there is an alternate way of handling the reporter issue that might better distinguish the prototype concept from the separate issue of the source of data on psychopathological signs and symptoms.

Fundamental psychopathological constructs must be delineated initially from clinician's experiences – there is no other place to begin to assemble a compendium of basic level diagnostic elements (e.g., a tendency to be manipulative, or to have culturally unusual beliefs and experiences). However, we believe a next critical step is to instantiate these constructs in instruments suitable for diverse reporters (e.g., patients, collateral informants, and treating clinicians). With these kinds of data in hand, one can then initiate an inductive-hypothetico-deductive process (1), in which data are collected and quantitative models are applied to these data through multiple rounds of data gathering and refinement, to arrive at an empirically based quantitative nosology built from data, from the ground level up (2).

One concern with focusing primarily or exclusively on clinicians is well-documented biases in clinical judgment. Clinicians, for example, have been taught systems that we know to be inaccurate (e.g., DSM-IV), and a sensible goal is to bootstrap a system that describes patient's actual experiences, as opposed to "pre-structuring" those experiences by DSM rubrics (whether consciously or unconsciously). Relatedly, prototypes can incorporate stereotypes, which may contribute to biases (e.g., racial or gender) in assessment (3). Obviously, data from other informants are also subject to limitations (e.g., less than perfect insight in self-report), so the idea is to not make a specific reporter exclusive. Rather, data from multiple reporters can and should always be taken into account in developing an empirically based nosology, to overcome the limitations of any given source (4).

Along these same lines, it is also important to distinguish a reporter's perspective from the "objective veridicality" of the report, which we can never really know in a definitive sense. For example, a person perceived by others as self-aggrandizing might not endorse "I am grandiose" but might describe his/her experience as "having to deal frequently with other people who are incapable of understanding my importance and talents". That is, regardless of any "objectively veridical" situation, the structure of psychopathology can be uncovered in data from different reporters, allowing comparison of how these structures are similar or different, as well as ways of combining information from different reporters in case formulation. Interestingly, some broad aspects of psychopathology structure seem consistent in data from various reporters: broad internalizing (anxiety and mood disturbance) and externalizing (substance use and antisocial behavior) spectrums are seen in clinician report (via the Shedler-Westen Assessment Procedure, SWAP (5)), collateral report (e.g., parents (6)) and self-report via structured interview (7).

Another deep issue Westen's commentary raises pertains to the ontological status of psychiatric diagnoses. Accompanying the prototype conception is the idea that psychiatric diagnoses exist as distinguishable, person-centered entities in nature. This conception works well only if there are discrete psychiatric diagnoses in nature, with discrete and separable accompanying etiologies and pathophysiologies, or at the very least, zones of rarity separating disorders in a descriptive space.

To date, these kinds of specific etiologies, pathophysiologies, and zones of rarity have proven highly elusive for psychopathology. Hence, although the prototype concept is extremely helpful clinically, prototypes need to be understood as salient combinations of constituent dimensions, as opposed to constructs that demarcate discrete groups of

persons (as such discreteness appears not to exist).

Combinations of dimensions that are independent do, nevertheless, combine in specific persons in a way that is clinically salient. For example, psychopathic personality entails at least three elements that do not tend to co-occur in people in general, but when they do co-occur *in a specific person*, the result is an unusual collision of dispositions that can be quite striking and pernicious (i.e., boldness or a lack or neuroticism combines with meanness or a tendency to be disagreeable, and with disinhibition or a lack of conscientiousness, to form a nasty and impulsive person who has no anxiety about their misdeeds (8)). In this way, prototypes can be understood as combinations of constituent dimensions that are clearly meaningful, but arbitrary in the sense that a nearly infinite set of combinations of constituent psychopathology dimensions exists in nature (9,10).

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