Introduction to the Special Section on Developing Guidelines for the Evidence-Based Assessment (EBA) of Adult Disorders

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The goal of this special section is to encourage greater awareness of evidence-based assessment (EBA) in the development of a scientifically supported clinical psychology. In this introductory article, the authors describe the elements that authors in this special section were asked to consider in their focused reviews (including the scope of available psychometric evidence, advancements in psychopathology research, and evidence of attention to factors such as gender, age, and ethnicity in measure validation). The authors then present central issues evident in the articles that deal with anxiety, depression, personality disorders, and couple distress and in the accompanying commentaries. The authors conclude by presenting key themes emerging from the articles in this special section, including gaps in psychometric information, limited information about the utility of assessment, the discrepancy between recommended EBAs and current training and practice, and the need for further data on the process of clinical assessment.

Keywords: evidence-based practice, evidence-based assessment, clinical utility

The past decade has witnessed a rapidly growing emphasis on evidence-based approaches to the provision of services within health and human service systems such as medical health care, mental and behavioral health care, social work, education, and criminal justice (Barlow, 2004; Mullens & Streiner, 2004). Simply put, evidence-based practice involves the use of an amalgamation of systematically collected data, clinical expertise, and patient preferences by decision makers (including practitioners, managers, and policy makers) when considering services options for, at one extreme, individual patients or, at the other extreme, for national populations (e.g., Institute of Medicine, 2001; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Within American professional psychology, the move toward encouraging the explicit consideration of empirical evidence in service provision activities is best typified by the treatment-oriented task force initiatives developed by several divisions of the American Psychological Association (e.g., Chambless & Ollendick, 2001; Norcross, 2001).

Given the long-standing emphasis on the centrality of accurate measurement for any scientific endeavor in psychology, it is surprising that evidence-based initiatives within psychology began with a focus on treatment rather than on assessment. This is most likely due to the greater relative involvement by psychologists in offering therapeutic services and the greater relative professional valuing of treatment over assessment activities. In the pursuit of enhancing the quality of psychological interventions through the conscious application of empirical evidence, it is rather ironic that the importance of defining what might constitute evidence-based assessment (EBA) has been largely overlooked. Even when assessment guidelines are presented side by side with those for treatment, they tend to be brief and underdeveloped relative to the treatment guidelines (e.g., National Institute for Clinical Excellence, 2004). Indeed, without scientifically sound assessment data, it is impossible to determine whether a treatment, patient characteristic, or therapeutic relationship variable has any impact on patient functioning. To address this issue and to promote the dissemination of evidence-based treatments, some psychologists have argued that assessment data from measures with established reliability and validity must be used in the evaluation of conditions for which treatment is sought and in the evaluation of the outcome of treatment (e.g., Chambless & Hollon, 1998; Kazdin, Kratochwill, & VandenBos, 1986; Ollendick, 2003). Taking this a step further, Weisz, Chu, and Polo (2004) recently recommended that evidence-based practice should be considered as an assessment–intervention dialectic involving the accurate identification of initial treatment targets, the selection of the most appropriate evidence-based treatment for these targets, and periodic assessment of the treatment to determine whether any adjustments to treatment are necessary (i.e., assess–treat–reassess–adjust treatment).

The first goal of this special section is to highlight the need to explicitly consider the role of EBA in the larger context of evidence-based psychological practice. Later in this introduction to the special section, we provide an overview of the excellent contributions in this special section that further our knowledge of EBAs for adult disorders. These articles and commentaries, in conjunction with a parallel special section on the EBAs for child and adolescent disorders (Mash & Hunsley, 2005a), provide thorough summaries of the scientific literature for a number of disorders and problems and pose several challenges that must be addressed if clinical psychology is to have a truly evidence-based set of assessment practices. At this point, though, we turn to a consideration of the second goal of the special section: to focus...
attention on the need to explicitly define what constitutes an EBA.

EBA

The term evidence-based assessment is used in the scientific literature in a variety of ways. The term has been used in the context of evaluating the appropriateness or quality of routinely provided health care treatments in comparison with the empirical evidence regarding the best treatment options for a specific condition. For example, Rascol, Goetz, Koller, Poewe, and Sampaio (2002) described their systematic review of the efficacy and safety of different interventions available for the management of Parkinson’s disease as an EBA. Likewise, Ansell, Watson, and Fogelman (1999) described as an EBA their efforts to compare established practice guidelines for the treatment of high cholesterol with data available from large-scale clinical trials conducted after the dissemination of the guidelines. In contrast, Corrigan (2002) used the same term to describe the strategy of diagnosing gastroesophageal reflux disease with an assessment protocol that had solid evidence of reliability and validity. This is closer to the meaning that most psychologists would typically understand of EBA and is similar to the term empirically based measures, adopted by authors of recent volumes on the assessment of anxiety and depression (Antony, Orsillo, & Roemer, 2001; Nezu, McClure, Ronan, & Meadows, 2000).

There is yet another manner in which the term has been defined, one that includes the standard psychometric indices of reliability and validity but goes beyond to include utility considerations (e.g., Cohen & Parkman, 1998). The clinical utility of assessment encompasses treatment utility (i.e., the degree to which clinical assessment data contribute to positive treatment outcomes; Nelson-Gray, 2003), diagnostic utility (i.e., the degree to which the assessment data contribute to the formulation of an accurate and complete diagnosis), and a range of additional factors such as assessment-related costs, the improvement in typical clinical decision making due to the assessment, alterations in the rates of false positives and false negatives associated with the assessment (on the basis of sensitivity and specificity indices), and the economic and psychological costs associated with these errors (Hunsley, 2003). It is this broadened definition of EBA, including reliability, validity, and utility considerations, that we adopted for this special section.

In defining EBA, it is also important to acknowledge that psychological assessment is an iterative decision-making process that goes beyond the simple utilization of a set of assessment measures. Ideally, then, EBA should target integrated assessment activities, such as formal or informal guidelines for obtaining and integrating data from multiple informants and multiple measures, not just individual tests or interview protocols. To our knowledge, though, there are no integrated assessment strategies that could be considered to be evidence-based. There are, of course, assessment guidelines that are empirically derived (for an example, see Snyder, Heyman, & Haynes, 2005); however, at present, there are no data that address whether the guidelines themselves are psychometrically sound and have appreciable clinical utility. Accordingly, at this point in time, a pragmatic approach to EBA involves, of necessity, a focus on discrete assessment tools. It is critical, though, that psychologists remain cognizant of the need to address, at some future point, the scientific standing of the assessment process itself. Further details on issues related to our conceptualization of EBA can be found in Hunsley, Crabb, and Mash (2004) and Mash and Hunsley (2005b).

The Special Section: Elements of EBAs

Given the nascent state of efforts to operationalize EBA, we believed that it was premature for authors contributing to this special section to follow strict, predetermined criteria in considering the nature of EBA in their respective areas. We did not, for example, set out criteria for the extent and type of validity evidence necessary for a measure to be deemed to be valid for a specific assessment purpose. We did, however, provide authors for this special section with a set of elements to consider in preparing their reviews. These included the following points.

First, psychometric evidence for a measure or an assessment strategy is always conditional, as reliability, validity, and utility indices are dependent on the nature of the clinical sample and criterion variable under consideration (cf. Hunsley & Meyer, 2003). Accordingly, EBAs should be considered to be disorder or problem specific. This presents somewhat of a conundrum in that one important purpose of assessment is to identify the nature of the problem(s). Thus, as has been recommended by many others, it may be necessary to conceptualize multiple stages wherein guidelines for initial assessments are problem nonspecific but would become increasingly problem specific as the assessment focus is refined. Thus, EBAs need to be embedded in the purposes of assessment, including screening, diagnosis, prognosis, treatment planning, treatment monitoring, and treatment evaluation. The criteria for the empirical support necessary for a measure to be considered an EBA might differ as a function of purpose.

Second, for each disorder or problem, there needs to be a clear statement of the state of the psychopathology literature. This includes indications of the main constructs that theory and research have established as important for a particular disorder or problem, key symptoms to assess, as well as common comorbid conditions and associated features that need to be examined. It should also include indications and methods for assessing broader life context factors consistently found to be relevant to the functioning of individuals with a particular disorder (e.g., quality of life, family factors, academic or work functioning, health care utilization, relational adjustment). Assessing these areas allows for a comprehensive evaluation that could guide clinical service decisions and serve as a baseline for determining treatment effectiveness. Of course, in attempting to obtain a comprehensive set of assessment data, psychologists must recognize that the amount and extent of such information needed for providing appropriate services is, ultimately, an empirical question (cf. Garb, 1998).

Third, EBAs need to be sensitive to gender, ethnicity, and cultural factors. Scientific evidence for the applicability of assessment tools needs to be demonstrated, not simply assumed, on the basis of generalizations from nonrepresentative samples.

Fourth, there must be psychometric evidence that the assessment instruments used as part of a more general assessment strategy are reliable and valid (concurrent and discriminant validity especially). In developing criteria for EBAs, specific required values need to be proposed for various types of assessment instruments, and evidence needs to be presented from at least two independent
published studies (i.e., requires at least some replication). In presenting psychometric evidence, it is important to recognize that formal instruments are only one component of the assessment process and that other components, and the entire process itself, need to be evaluated as well.

Fifth, because of the present state of the research literature, evidence for the utility and incremental validity of assessment tools and strategies is valuable but not compulsory. Currently there is insufficient research on these elements in most clinical problem areas. However, our hope is that the eventual sine qua non for any assessment tool strategy is in its utility in helping to bring about clinical change.

Finally, there needs to be an acknowledgment that although each strategy may be empirically supported, there may be little evidence on the reliability and validity of clinician judgment for how to organize the resulting data into a coherent and clinically useful evaluation. Long-standing questions regarding the reliability and validity of clinical decision-making algorithms in the field of assessment will likely require discussion in the current context (cf. Garb, 1998). When the primary assessment focus is the pretreatment identification of problem areas and the establishment of baselines, this may not be a major concern because the psychologist has opportunities to refine and correct any errors in inference. It is more of a concern, however, when the entire clinical service is the assessment itself. In such circumstances, the duration of clinical contact with the patient is relatively brief, which limits the opportunities to obtain further information that could lead to alterations in the psychologist’s clinical formulation. Without an appreciation of the limitations to clinical judgment, it is possible that the conclusions drawn from the assessment by the psychologist may become reified when used by other professionals.

Contributions to the Special Section

The special section begins with Antony and Rowa’s (2005) contribution on the assessment of adult anxiety disorders. The authors present two main lines of argument in their article. The first deals specifically with the domains of assessment that are critical in assessing anxiety disorders. As they note, most patients with anxiety symptoms present with many problems and, as a result, may either partially or fully meet criteria for several diagnoses. To facilitate a comprehensive assessment that is optimally useful for treatment planning and implementation, Antony and Rowa strongly recommend that much more than the patient’s diagnostic status must be evaluated. Specifically, they recommend that assessment incorporate an evaluation of anxiety triggers and cues (situational, interoceptive, and cognitive), avoidance behaviors, compulsions and overprotective behaviors, physical symptoms and responses, skill deficits, associated distress and functional impairment, development and course of the clinical problems, treatment history, environmental and family factors, general medical and health issues, and common comorbid disorders (including mood disorders and personality disorders). Beyond the issue of what constitutes EBA for anxiety disorders, Antony and Rowa also address the issue of what exactly constitutes EBA. Their insightful comments on this, along with their cautions about possible obstacles to the dissemination of EBA, do much to elucidate the challenges associated with developing EBAs.

Joiner, Walker, Pettit, Perez, and Cukrowicz (2005) address the issue of assessing depression in adult patients. Like Antony and Rowa (2005), these authors touch on the minimum criteria necessary for EBAs and how the purpose of assessment (e.g., screening vs. treatment monitoring) influences the choice of preferred assessment methods. With respect to the assessment of depressive symptoms, Joiner et al. stress that the evaluation of depressed mood, anhedonia, and suicidality (including distinguishing between suicidal ideation and suicidal plans) are critical. Furthermore, on the basis of extensive research evidence, these authors make a convincing case for the need to also assess subtypes of depression, the chronicity and course of the depression, and common comorbid conditions (especially bipolar disorder, anxiety disorders, eating disorders, substance use disorders, and personality disorders). Despite the voluminous literature on the psychological assessment of depression, they also emphasize that much more research is needed to establish the utility of psychological assessment efforts in the context of depression.

Widiger and Samuel’s (2005) contribution addresses the challenges associated with the EBA of personality disorders. A central focus in their article is the need to balance a thorough and accurate assessment with the limited time most psychologists are likely to have to conduct such an assessment. Accordingly, after reviewing the psychometric status of major self-report measures and semi-structured interviews, they recommend a two-stage assessment process be adopted. The first stage involves the administration of a self-report inventory; if maladaptive personality traits are identified, this should be followed with a semi-structured interview to determine the presence, nature, and severity of any possible personality disorders. As they sagely note, though, the use of established semistructured interviews must involve careful attention to the influence of age of onset of the personality problem, gender biases, cultural and ethnic factors, and probable inaccuracies in patient self-perception and presentation. A significant gap in the EBA of personality disorders that Widiger and Samuels identify is that existing assessment tools were not designed to be sensitive to changes in personality functioning. A direct implication is that it should be a priority for personality disorder researchers to develop new tools for the monitoring and evaluation of treatments for these common but vexing clinical conditions.

Evidence-based approaches to assessing couple distress are the focus of the article by Snyder et al. (2005). On the basis of extensive research on couple functioning and distress, the authors propose a conceptual framework for couple-based assessment strategies that included both individual and dyadic characteristics that have been found to be implicated in relationship problems. On the basis of this framework, they describe assessment tools for assessing variables such as each partner’s distress and each partner’s relationship-related behaviors, cognitions, and affect. Cutting across several assessment methods, including interviews, observations, self-report, and informant report, Snyder et al. highlight both the availability of existing measures and the gaps in our knowledge of the psychometric adequacy of these measures. They conclude their article with several important evidence-based recommendations for assessing patients who are in intimate relationships, including (a) the routine assessment of couple functioning when treating individuals and (b) the routine assessment of domains that are known to be strongly linked to relationship conflict and those
domains that have particularly adverse effects on couple functioning (such as physical aggression and substance abuse).

To round out this special section, there are commentaries from two respected, well-informed experts on psychological assessment. Drawing on the perspective of international efforts to promote evidence-based health care practice, Barlow (2005) examines the role EBA should have in modern health care services. He also emphasizes the ways in which EBA is associated with current integrated models of psychopathology, which are also directly responsible for recent developments in psychological treatments that are both efficacious and effective. In his commentary, McFall (2005) examines EBA from the perspective of conceptual factors that underlie measurement efforts in psychology in both clinical and research domains. The importance of (a) understanding the multiple layers of theoretical assumptions that underpin our assessment tools and (b) having demonstrable evidence that these tools can contribute something of value to clinical services is highlighted in this article.

Emergent Issues in EBA

The contributions to the special section address the assessment of the most common adult problems seen by clinical psychologists. Although each article focuses on a specific problem or diagnosis, there are some common themes that emerge from these articles. To conclude this introduction to the special section, we highlight the dominant themes across contributions.

Gaps in Psychometric Information

At a minimum, for a measure to have any value for clinical use, information on reliability and validity indices must be available for all the assessment purposes for which the measure will be used. Knowing that a test has achieved a certain level of psychometric adequacy for diagnostic purposes says nothing about its sensitivity to treatment-related changes in patient functioning. To truly know the psychometric adequacy of a measure, data must be available that takes into account the gender, age, and ethnic characteristics of people for whom the measure will be used. Moreover, because base rates affect the sensitivity and specificity of measures, it is important to have measurement data from relevant clinical and community samples. As noted repeatedly in the articles, even with the most commonly used measures, there are considerable gaps in our knowledge of these basic psychometric requirements. Much more needs to be done to ensure that our measures are reliable and valid for the populations with which we use them and the purposes for which we use them.

Ensuring Utility in Clinical Assessment

Authors in this special section often allude to the challenge of balancing the time required for a comprehensive evaluation and the reality of time constraints encountered in service settings. This challenge pertains to both the method of assessment (e.g., self-report questionnaires vs. semistructured interviews) and to the scope of constructs included in the assessment. What is sorely lacking is clear guidance from the research literature on which constructs are crucial for an adequate evaluation of a problem and from which informants they should be assessed (cf. Johnston & Murray, 2003). Even if such information is available, there is almost no literature that considers the extent to which inclusion of a measure consistently improves upon clinical decision making and/or the outcome of any clinical service. Such data are relevant to all measures but are particularly germane to decisions to use time-consuming or costly assessment tools. For example, if research demonstrated that the early accurate identification of Axis II disorders with a semistructured interview led to better treatment outcomes and less premature termination of services, then a very strong case could be made for the use of such an interview with patients who, after screening, are suspected of having a personality disorder.

Which Methods? Which Measures?

As we have noted elsewhere (Hunsley et al., 2004), the kinds of assessment methods (including semistructured interviews, problem- or symptom-specific self-report measures, and self-monitoring) most frequently presented by authors as contributing to EBA are precisely the kinds of methods that surveys of graduate teaching in assessment show are underrepresented in the training of professional psychologists. Likewise, as evident from numerous surveys, the majority of specific measures referred to by the authors in this special section are conspicuous by their absence in the assessment practices of most psychologists. In sum, if psychologists are to learn and routinely use EBAs, a major shift in training and practice is necessary.

Clinical Decision Making

Psychological assessment involves the collection and integration of multiple forms of data from multiple sources and perspectives. The authors in this special section have, for the most part, focused on discrete elements that contribute to an assessment. Unlike pieces of a jigsaw puzzle, these assessment data rarely fit neatly together, with one set of findings perfectly conforming to other information. Even if each measure used in an assessment is evidence based, because of limitations in human judgment, there is no guarantee that the resulting synthesis of information and conclusions are themselves truly evidence based. Although there can be considerable similarity in the case formulations developed for a patient by psychologists sharing the same theoretical orientation, the mean interrater reliability of such formulations is moderate at best (e.g., Barber & Crits-Christoph, 1993; Persons & Bertagnoli, 1999). Bearing this in mind, psychologists should increase use of instruments and strategies that are evidence based as an important step in correcting the negative impact of the many biases and heuristics that negatively affect clinical judgment.

Finally, in the process of editing both this special section and the parallel special section in the Journal of Clinical Child and Adolescent Psychology (Mash & Hunsley, 2005a), we have been struck repeatedly by feedback from authors and reviewers about (a) the complexities involved in attempting to develop EBA criteria and guidelines and (b) the enormity of the task associated with establishing EBA guidelines for commonly seen clinical conditions. In light of the issues raised in the articles in this special section, it may indeed seem at times to be a Sisyphean task to operationalize what constitutes EBA. On the other hand, for psychologists to knowingly act as if the reliability and validity data
presented in test manuals are all that are necessary for assessment to be evidence-based is akin to, as the character Gollum does in the movie The Lord of the Rings: The Two Towers (Jackson, 2002), covering our ears and repeatedly saying “Not listening, not listening!” to drown out our doubts and confusion.

Establishing the utility of an assessment measure, for example, may not be as glamorous as evaluating a new and promising intervention, but it is just as critical to the delivery of high-quality clinical services. Without attention to EBA, the promotion and dissemination of evidence-based treatments has been likened to building a magnificent house without bothering to construct the foundation (Achenbach, 2005). With a century of conceptual and practical developments in psychological assessment behind us, we have the requisite scientific knowledge and sophistication to ensure that there is a solid evidence base for the psychological assessment services received by countless people every year. The tasks now are to establish a comprehensive evidence base (i.e., not just some limited reliability and validity data) and to ensure that such information is accessible to all who conduct psychological assessments.

References


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