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**NOLA in Focus**

**Evidence-Based Assessment: Increasing Efficiency and Accuracy in Clinical Practice**

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Consortium presenter Ryan McGill shares trends and tips for implementing evidence-based assessment to improve clinical decision making.

Evidence-Based Assessment: Increasing Efficiency and Accuracy in Clinical Practice

Assessment plays a pivotal role in classification/diagnosis and treatment planning for students experiencing academic and behavioral difficulties. However, in spite of some incremental advances, assessment data are often used in ways that can exacerbate decision-making errors and lead to poor treatment outcomes (Wilcox et al., 2023). In this “Presenters in Focus” Q&A, convention presenter Ryan McGill outlines how an evidence-based assessment approach can be used to promote more efficient and effective assessment and interpretive practices. He will describe these concepts in more depth during his Documented Session, Evidence-Based Assessment and Clinical Decision-Making in School Psychology, at the 2024 national convention in New Orleans.

Are there specific experiences you have had or trends you have observed in clinical practice that led you to pursue a line of research about evidence-based assessment?

It all started during my internship when I began to question the genesis of popular interpretive heuristics, and those preliminary investigations evolved as I progressed into my doctoral studies. A pivotal moment was when my advisor required me to read Watkins’ (2000) systematic critique of cognitive profile analysis, which opened the door to a wider body of research calling into question those practices. In essence, my interest in evidence-based assessment (EBA) is about trying to figure out the “why” so that I can try and relay that information back to practitioners and stakeholders. Whereas debates on these matters in the 1990s dampened some interest, the rapid expansion of profiles of strengths and weakness (PSW) models for learning disability identification from 2012 onward suggested a renewed enthusiasm
for profile analysis methods. That shift coincided with my transition to academia and ability to pursue those lines of inquiry more systematically (e.g., McGill et al., 2018).

**What are some of the pitfalls related to clinical assessment that school psychologists should be mindful of in their practice?**

At its heart, assessment is a decision-making process. Thus, as our models increase in complexity, we can fall prey to base rate fallacy, where unique observations are given more diagnostic weight than they otherwise should. Whereas we can utilize clinical judgement to override base rates, its protection assumes that we are a) operating in a high validity environment and b) receiving systematic feedback on the accuracy of our decisions (Kahneman & Klein, 2009). Unfortunately, in many practice environments, these conditions are often lacking. Another related pitfall is the dilution effect, in which information of diagnostic value is discounted in the presence of non-diagnostic information. These effects have been observed in analysis of clinical judgement in school-based evaluations (e.g., Aspel et al., 1998).

**What sort of data is most informative for clinical decision making and how should school psychologists seek it out in the assessment process?**

Ultimately, any data that helps to reduce uncertainty. It is important to keep in mind that, absent any additional information, we should start by essentially betting the base rate. That is, assuming the likelihood that an individual has a disorder is most likely low unless compelling information emerges to substantially improve the odds of having that disorder from the base rate (e.g., a positive result of a test with high diagnostic value). Obviously, obtaining scores from tests that have robust reliability and validity is an important prerequisite for that. However, conventional psychometric integrity alone does little to inform us of the value of the hypotheses that clinicians generate throughout the assessment process. Here is where we enter into the
proverbial “black box” of the mind of the clinician where information is iteratively weighted and synthesized, culminating in a terminal decision. Therefore, the value in any assessment process is the likelihood that it results in accurate outcomes for clients. Fortunately, there is an array of software and EBA care packages freely available on the internet that can help clinicians calculate diagnostic efficiency statistics and construct nomograms, which can be used as important tools for improving decision-making accuracy (Pendergast et al., 2018).

**What is the most important message that you would like all school psychologists to understand about evidence-based assessment and clinical decision making?**

EBA is an integrated framework for promoting more effective and efficient assessment practices. In its formal sense, it is a series of steps with some more applicable to school psychology than others. Regardless of whether they are adopted wholesale or only in part, I believe they are important for encouraging practitioners to consider the epistemologies underlying their professional practice.

It has long been said that competent assessment practice is both an art and a science. It is my belief that amplifying the latter is essential for informing the former. Nevertheless “evidence-based” has become a loaded term and thus there is a tendency to view it as a vehicle for restricting professional autonomy. EBA is not about developing a checklist of approved methods or tests, it’s about giving practitioners information for evaluating the evidential quality of the assessment literature and improving their diagnostic confidence. Put simply, if assessment processes were incorruptible then there would be no need for the EBA approach.

**What would you recommend to practitioners whose state or district assessment requirements conflict with evidence-based assessment practices?**
Whenever regulations or local policy fail to align with existing evidence (e.g., discrepancy model) it can create the illusion of validity and lead to disciplinary stasis. Add to that the fact that most practitioners don’t have ready access to influence networks as a matter of course and already have enough on their plate to deal with. Nevertheless, the successful reform efforts that I have been made aware of to this point have all been spurred from the bottom-up.

Aside from making the important decision to go from zero to one and reform their own practice to the extent that they can, it is important to consider that practices exist because there is inherent investment (i.e., sunk cost) in their existence. Hence, spearheading a broader conversation is often the most difficult step in the reform process.

One must skillfully navigate the politics in play because simply dropping evidence in front of people is not an effective debiasing strategy in most circumstances. In an ideal world, problematic practices would degrade in accord with the evidence or the lack thereof. In reality, they often just slowly fade away (Meehl, 1978). I generally find that clinicians have more freedom to vary than they think and even the smallest changes can pay dividends if brought to scale.
Bio:

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References


