Creating Conditions to Support Ethical Clinical Decision Making and Practices

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Practitioners who base decisions largely on intuition and related subjective forms of clinical wisdom are prone to information and emotional processing biases that can produce inaccurate judgments. Relying largely on subjective approaches to processing clinical information can result in unethical practices that can extend suffering and cause harm to our clients (Grove, Zald, Lebow, Snitz, & Nelson, 2000). Thankfully, the scientific method and related procedures for prediction can guard against the pitfalls of using exclusively intuitive and other subjective approaches to clinical decision making that are prone to bias. This article highlights some of the research designed to guide us in creating conditions that result in ethical clinical decisions and practices likely to benefit rather than unintentionally harm those we serve.

When we diagnose clients and recommend specific treatments we process large amounts of data from many sources in order to arrive at judgments. Judgments usually include diagnosis, likelihood of future behaviors, and the intervention most likely to result in desired outcomes. This process, whether it depends on intuition or application of the scientific method of processing, is referred to as the clinical prediction approach. It is time consuming, costly, and prone to many information and emotional processing biases, especially when conducted intuitively.

The alternative approach is referred to as the mechanical prediction approach. It relies on formal algorithmic procedures to process large amounts of data. After conducting a large meta-analysis, Grove et al. (2000) discovered that the mechanical method is often superior or comparable to the clinical method at predicting outcomes. Of course the mechanical approach relies on humans to conduct research, choose prediction equations, and creatively identify the predictor variables that serve as input for mechanical processing. Computers are not prone to information processing biases but are objective in processing data and arriving at decisions in ways that can serve many more in need and much more efficiently and often affordably. If you think you are the exception, read Grove and Meehl (1996).

One particularly exciting application of both the scientific and mechanical methods to detect who will attempt suicide was reported by Nock et al. (2010). In this study the patients in an emergency room with a history of attempting suicide and the clinicians attending to them were asked to judge the likelihood of future attempts. Patients also completed a behavioral task that measured their reaction time (RT) to classifying semantic stimuli words that referred to the self, life, and death/suicide. Those with the fastest reaction times to suicide-related stimuli were presumed to have a strong implicit or automatic association between self and suicide. The mechanical prediction approach that used the implicit association RT index as a predictor was superior to patient and clinician prospective predictions of suicide attempts even after controlling for all of the usual risk factors. So it seems that the automaticity of the client, but not the clinical judge, can be a useful source for predicting an outcome very important to psychologists.

Many different investigators have proposed two distinct processing systems, both of which have specific relevance to the topic of clinical decision making. The automatic System 1 is the basis for intuition and is often referred to as implicit. It relies on primitive structures of the brain evolutionarily. It occurs without consciousness or intention, integrates large amounts of data quickly based often on reflex or past conditioning, does not require a high level of processing resources, and generates quick associations in response to stimulus cues and emotional states.

System 2 is volitional and conscious and the basis for rational and logical thought processes. It allows for objective evaluation of data systematically using the scientific method and is based on verbal and mathematical processes. It relies on evolutionarily more recent regions of the brain and requires attention, intention, and consciousness. It is much slower to arrive at conclusions and requires greater processing resources than System 1. For a review of several dual-processing theories see Hodgkinson, Lagan-Fox, and Sadler-Smith (2008).

Thankfully the two systems can be integrated and interact so that we can bring awareness to the automaticity. In fact, awareness of mental activity or metacognition that is marked by intention, attention, and a relational quality of kindness is also referred to as mindfulness and can allow us to integrate the two systems and reduce the automaticity that can result in clinical errors and unnecessary suffering.

When we diagnose clients and recommend specific treatments we process large amounts of data from many sources in order to arrive at judgments.

A highly recommended resource for reducing judgment errors is the chapter by Ruscio (2010) and the text in which it appears. Briefly, Ruscio suggests that we stay mindful of classic cognitive biases and heuristics, including confirmation and hindsight biases, and instead generate multiple hypotheses for which we systematically evaluate evidence before forming a conclusion (i.e., apply the scientific method). He suggests that we apply basic principles of probability,

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whether or not it can be articulated in the moment. Neuroscientific data (McGilchrist, 2009; Schore, 2012) that demonstrate how the right hemisphere is dominant for implicit, nonconscious processes and nonverbal emotional communications is mounting. Implicit processing is relevant to the neuroscientific understanding of clinical wisdom because it represents at least part of what psychotherapists do. For example, empathy and nonverbal emotional communication are by and large implicit processes.

It must be clear to most seasoned and empathic clinicians that a significant part of the clinical work they perform is difficult to articulate yet experienced as powerful and even perhaps personally meaningful. Neuroscience is demonstrating that this part of our work is crucial to its effectiveness.

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statistics, and research evidence to individuals and integrate data about base rates into our decision-making processes. Importantly he suggests we not habitually conclude that our clients are exceptions to what well-designed research studies show. He gives the example of clinicians who do not use evidence-based interventions in the treatment of anxiety disorders despite the massive amount of research in support of this treatment as a first-line intervention. What Ruscio (2010) describes is essentially application of the scientific method and, thankfully, there are many efforts to support this practice, including guidelines for evaluating evidence-based practices (EBP) and the literature in which they are described (Spring, 1997).

Compilations of examples show how various clinicians apply research findings in practice. For an example see the chapter by Molnar (2014), which describes the integration of the scientific method into practice to diagnose and treat generalized anxiety disorder (GAD). Clinicians often automatically associate the report of "racing thoughts" with a diagnosis of bipolar disorder when clients are actually referring to the mental activity of worry that is a hallmark of GAD. Assessment that employs standardized and valid measures to determine diagnosis and track outcome can support us in forming accurate judgments likely to result in selection of interventions (if we use EBPs) that will benefit our clients.

In summary, subjective approaches to clinical judgment, including use of intuition, are subject to information and emotional processing biases that can produce inaccurate judgment and result in maladaptive behaviors, including interventions not matched to treatment needs that can cause harm to our clients. Use of the scientific method and associated mechanical prediction procedures can be integrated into our clinical process and reflect an ethical practice.

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