Evidence-Based I–O Psychology: Lessons From Clinical Psychology

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Although I agree with the general thrust of Briner and Rousseau's (2011) article, there is an important omission with respect to evidence-based psychology that should be addressed and from which industrial-organizational (I-O) psychologists may benefit. Briner and Rousseau trace the origins of the evidence-based movement to a 1991 article in the British Medical Journal and conclude that it is now well established in medicine and nursing. They also cite recent trends toward evidence-based interventions in education, social work, criminology, government policy making, and management. However, there is also a substantial amount of work on evidence-based interventions in clinical psychology that may provide lessons for I-O psychology as it considers evidencebased interventions.

In 1993, Division 12 Clinical Psychology of the American Psychological Association (APA) established a Task Force on the Promotion and Dissemination of Psychological Procedures. The Task Force developed criteria for evaluating psychological treatments and made recommendations for educating psychologists, other health professionals, and the public about the efficacy of treatments (Chambless, Baker, et al., 1998; Chambless, Sanderson, et al., 1996;). The Division 12 Task Force recommended

Correspondence concerning this article should be addressed to Victor M. Catano. E-mail: vic.catano@smu.ca criteria for evaluating psychological (read this as clinical) treatments that were primarily based on establishing the efficacy of the treatment in two good betweengroup design experiments. The task force used the criteria in evaluating treatments according to their application to specific mental health disorders. A quick search of "evidence-based practice" in PsycLit will show that these criteria are used today to evaluate an increasing number of therapies; however, the recommendations were not without controversy.

Counseling, psychotherapy, and behavioral medicine developed other frameworks to assess treatment efficacy. In response to the problem of how best to conceptualize and examine the scientific basis for evidence-based practice, APA in 2005 established a Presidential Task Force on Evidence-Based Practice in Psychology (APA Task Force, 2006). Although the term "psychology" is used throughout the report, it is clear that the focus is on evidence-based treatments related to "all direct services rendered by health care psychologists, including assessment, diagnosis, prevention, treatment, psychotherapy, and consultation. As is the case with most discussions of evidence-based practice, we focus on treatment'' (APA Task Force, 2006, p. 273). The report identifies multiple types of research evidence that can be used to establish evidence-based interventions, the role of clinical expertise in identifying and integrating best research evidence with clinical practice, and the specification of patient

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characteristics (patient is used to designate any recipient of a psychological treatment), culture, and preferences. The report concludes with the *APA Policy Statement on Evidence-Based Practice in Psychology* that addresses the three issues of best research evidence, clinical expertise, and patient characteristics.

What can we learn from our clinical cousins? Briner and Rousseau propose their systematic review as the best means of establishing the efficacy of interventions. This should not be taken as the only means or the preferred means of assessing empirical evidence related to a treatment. The APA Task Force (2006) identified nine research designs that could contribute to evidence-based practice, including metaanalysis, which Briner and Rousseau dismiss. Although some of these research designs may not be appropriate for I-O psychological practice, many others are, for example, well-designed randomized control trials. Apart from the methods used to assess the empirical evidence, there are four major lessons from clinical psychology that can inform this debate.

Lesson 1: The Role of the I-O Psychologist and the Context of the Intervention

The first lesson learned from clinical psychology is that the role played by the I-O psychologist and the context in which the intervention takes place must be considered in postulating guidelines for any systematic review. The role of the psychologist and the context in which the intervention takes place are as important to I–O practice as they are to clinical interventions. Wampold and Bhati (2004) note that there are two consequential issues related to ignoring the expertise of the psychologist in implementing a clinical treatment. The first is that variability among psychologists may inflate treatment effects because variability in treatments may be due, in part, to the variability of the psychologists involved in the treatment and not the treatment. This possibility may lead to the conclusion of a treatment's

effectiveness when the treatment depends on the specific psychologist. Second, they note that when variability of psychologists have been examined, variability among psychologists may be far greater than variability among treatments. Are we certain that outcomes for 360-degree feedback and assessment centers, among others, have nothing to do with the expertise of the psychologist administering the intervention? Are there differences in intervention outcomes related to the experience of the psychologist?

As we move to a global economy and transnational organizations, will an intervention that is effective in one culture be as effective in another? To what extent must the cultural context be considered in evaluating the outcome of an intervention? Will a transformational leadership intervention designed for managers in the United States be effective with unionized Canadian civil servants? Will individual preselection assessment testing work in Middle Eastern countries where there is a tradition of collaboration on tests? These are just a few examples. Many variables can influence the outcome of an intervention including the nature of the organizational setting and the participants involved in the intervention. Briner and Rousseau's systematic review guidelines do not give any explicit direction to consider either the competence of the psychologist or the cultural setting in which the interventions took place. The lessons learned from clinical psychology suggest that these must be considered as part of the review.

Lesson 2: Science and Practice Linkage

Briner and Rousseau are correct in noting the need for better linkages between research and practice. The need for this linkage is very evident in clinical psychology where the increased emphasis on evidence-based interventions has brought about changes designed to ensure that both research and practice contribute to the knowledge base and, in the process, reduce any gaps between both (Kazdin, 2008). I–O psychologists should appreciate the need for greater dialogue between "scientists" and "practitioners." Practitioners must understand the need to base interventions on empirical evidence; scientists must understand the need for research to solve immediate, practical problems and to speak to those issues in "the language of business." A good illustration of this imperative is found in the report of the Society for Industrial and Organizational Psychology's (SIOP's) Job Analysis and Competency Modeling Task Force (Shippmann et al., 2000). Although job analysis procedures, mostly favored by researchers, were viewed as having higher rigor than competency models favored by practitioners, which were viewed as being better linked to business needs and goals and meeting the needs of consumers, the report noted that competency modeling could benefit from some job analysis procedures including efforts to evaluate the consistency and reproducibility of results, that is, to produce evidence in support of the competency model.

Lesson 3: Credentialing and Regulation

Briner and Rousseau claim that one barrier to evidence-based practice is the predominance of master's-level practitioners who have learned to practice I-O psychology in unsupervised ways and who have a limited capacity to understand research and access new evidence. It is ironic that in an article promoting evidence-based outcomes, no evidence is supplied to support this statement. Many master's programs are 2 years in duration and include supervised practicum placements that are not part of doctoral programs. Master's programs include required courses on ethics and professional practice as well as statistics, including multivariate, and research designs. Obtaining a degree, master's or doctorate, in I-O psychology or in clinical psychology is only the first step in becoming a practitioner.

Regulatory systems exist to ensure the protection of the welfare of the public

and clients of the practitioner and to guarantee that the practitioner operates in accordance with accepted standards of professional ethics and practice guidelines. In those jurisdictions that certify or register master's-level psychologist, the candidate must undergo a period of postdegree supervised practice. Even doctoral-trained psychologists must meet minimum supervised periods of practice. The candidate must also pass the Examination for Professional Practice of Psychology, the same exam required for credentialing of clinical psychologists. This exam is comprehensive and has a good deal of content related to I-O psychology, statistics, and research methodology; candidates must also pass an oral ethics exam before being placed on the registry. SIOP has long held the position that I-O psychologists should be exempt from state regulatory bodies, as they only pertain to health-oriented disciplines in psychology, and many I–O psychologists remain outside a regulatory framework. Perhaps, it is time for SIOP to reconsider its position on certification as a means of ensuring that I-O psychologists "do no harm." Notwithstanding the certification issue, practitioners remain subject to their professional code of ethics.

Lesson 4: Ethics and Evidence-Based Practice

Is a psychologist behaving ethically when they provide a service or treatment that has no known benefit? I-O psychology should consider following the lead of clinical psychology in moving toward practice guidelines that state practitioners should use only those interventions that can be supported through empirical evidence. Only empirically supported interventions should be accepted as meeting a practitioner's ethical obligations to the profession. In clinical psychology, third-party payers (governments, insurance companies, and HMOs) increasingly support only those psychological interventions that are supported by empirical research (McHugh & Barlow, 2010). The movement toward evidence-based practice has had a tremendous influence on both the training and provision of service in clinical psychology (Hunsley, 2007) and will likely have the same impact on I–O psychology. I–O practitioners have an ethical obligation to ensure that the interventions they propose to clients meet acceptable professional standards. I–O scientists have an obligation to do the empirical research in support of organizational interventions. As I–O psychologists, we have an obligation to ensure that the value of evidence-based interventions is included in our educational and training programs.

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