Introduction to the Special Issue on Clinical Psychology and Behavioral Science: Processes, Principles, and Analytic Strategies

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The current special issue has as its focus the relationship between behavioral science and clinical psychology. Clinical psychology encompasses many schools of thought, one of which is the behavioral science wing. This wing encompasses a broad range of interests, including the use of applied behavior analysis (ABA) as in developmental disabilities and clinical behavior analysis (CBA) in psychotherapy. The eight conceptual papers in the current issue focus on one or both of these areas. One of the key themes of these papers is an attempt to articulate the links between the authors' clinical interests and existing or new concepts and practices in behavioral science.

Three papers contribute to issues that are directly relevant to ABA. First, the paper by Greer attempts to advance behavior analysis generally by offering the concept of learned reinforcement as the selector of behavior. Specifically, Greer describes how the learning of new reinforcers results in the development of verbal operants that may significantly influence the practice of ABA. Second, the article by Hayes et al. offers new tools to ABA therapists, by exploring the benefits of acceptance and commitment training or therapy (ACT) for ABA. Third, the paper by Kavanagh, Barnes-Holmes, and Barnes-Holmes focuses on the behavioral processes involved in relational perspective-taking, and false belief. In doing so, the paper offers an alternative approach to traditional mainstream views of this subject, which is likely to be of benefit to ABA practitioners.

The five remaining papers, in our view, contribute to CBA. First, the paper by Barnes-Holmes, Barnes-Holmes, and McEnteggart presents an updated version of relational frame theory (RFT) and its implications for process-based psychotherapy. Second, Callaghan and Follette present interpersonal behavior therapy (IBT), highlighting the importance of functional-analytic assessment and adherence to behavioral principles in clinical interventions. Third, Ong, Twohig, and Levin's paper presents process-based cognitive behavioral therapy (PB-CBT) as a transtheoretical approach to improving mental health service provision. Fourth, Zettle highlights the importance of targeting relevant processes and using both process-based and outcome measures, in the context of single-subject designs and evidence-based practice. These issues are directly relevant to the contemporary debate around the use of treatment manuals, and the distinctions and relative merits of a priori versus post-hoc manuals. Fifth, the paper by Vlaeyen et al. explicitly advocates for single-subject designs and their integration with scientist-practitioner interests.

In reflecting upon all eight papers together, it may be useful to return to the title of the special issue and in particular to the use of the two terms: process and principle. These terms often appear to be used interchangeably in the literature. Given the extent to which these terms feature in contemporary conversations in clinical psychology and in the search for new clinical treatments (see Hoffman & Hayes, 2019), perhaps the special issue should begin by considering whether a distinction between the two terms should be made. That is, what is the difference, if any, between a process and a principle?

In psychology, the term "process" is used in many different ways, including as a mental process, a brain process, a behavioral process, and a social process. In contrast, the term "principle" has been more strongly and traditionally associated with the field of behavior analysis (as in 'principles of behavior analysis'; e.g., Grant & Evans, 1984). Why has behavior analysis so often employed the term principle rather than process? We would

contend that processes do not require analyses, but principles do. In so far as we are correct, the distinction between processes and principles seems to be fundamentally important to the contemporary conversation about the importance of basic processes in the assessment and treatment of human psychological suffering.

The term process seems to be used to refer to psychological change that occurs independently from any form of analysis. For example, “awareness” may be referred to as a process that occurs whether or not it is being analyzed for any given purpose. By contrast, a principle seems to require some specification of the act of the analysis by the scientist or clinician. Interestingly, Catania (1979) hinted at this distinction within behavior analysis in between “operation” and “process”. For example, he argued that reinforcement as an operation involves specifying a contingency between responding and consequences; reinforcement as a process involves a change in the response pattern that has been shown to be due to that contingency and not to some other factor. Combining operation and process renders the term principle more appropriate, at least within behavior analysis. Specifically, claiming that behavior changed because of a contingency requires some form of analysis to determine if that was in fact the case. In other words, a principle requires that you demonstrate prediction and influence over a process. Critically, therefore, a principle requires that you specify a variable or variables that allow you to control a process; the term process alone does not require such specification.

Going forward, it may be important to more clearly recognize this distinction between process and principle in light of the call for process-based therapy. A process-oriented field of clinical psychology may be an improvement upon one based on DSM categories, but if it remains largely process-based, without a focus on principles, a significant risk seems to emerge. Specifically, there may be a tendency to focus on proving which process-based model is the best, at the expense of identifying variables that allow you to control or change

those processes. In simple terms, process-based therapy is not the end game. Principle-based therapy would be the end game because the scientific units of analysis would specify what needs to be targeted or manipulated for change, as well as the specific conditions under which change occurs.

References

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