The Special Issue on the Education of Behavior Analysts: Common Themes

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Abstract

The goal of *Behavior Analysis in Practice*'s special issue on the education of behavior analysts is to highlight a variety of works on the topic of teaching and mentoring students in behavior analysis. The special issue is composed of empirical studies that evaluated teaching procedures aimed at the effective training of behavior analysts; surveys focusing on the content of training programs, including common readings and other components; and commentaries on topics pertaining to teaching and mentoring behavior analysts. Several themes emerged across the issue, including (a) a focus on knowledge of basic principles of behavior analysis, (b) the direct application of operant-based principles in the teaching and mentorship of behavior analysis students, and (c) a significant emphasis on the meaningful application of behavior analysis.

Keywords Education · Mentorship · Applied behavior analysis · Behavior analysis

The field of behavior analysis has long taken a strong interest in the general topic of education, including associated processes, procedures, and methods for evaluating its effects (e.g., Baer, Wolf, & Risley, 1968; Skinner, 1984; Twyman, 2014). This interest has included a wide variety of topics including (but not limited to) academic outcomes in children and adolescents (e.g., Lang & Rispoli, 2015; Martens, Daly, & Ardoin, 2015); skill acquisition in early childhood education contexts (Conard, Johnson, Morrison, & Ditzian, 2016), in individuals with autism and other developmental disabilities (Lovaas, 1987), and in professionals from a variety of fields and industries (e.g., Gravina et al., 2018); academic outcomes of postsecondary students (Fienup, Hamelin, Reyes-Giordano, & Falcomata, 2011); and teaching approaches to train individuals to implement behavioral interventions (e.g., Heitzman-Powell, Buzhardt, Rusinko, & Miller, 2014; Shapiro & Kazemi, 2017) and other clinic and educational-based skills (e.g., Gravina et al., 2018). In addition, educational practices and considerations specifically aimed at the teaching of behavior analysts has been, and

continues to be, of primary interest to the field (e.g., Albright, Schnell, Reeve, & Sidener, 2016; Blydenburg & Diller, 2016; Carr, Nosik, & Luke, 2016; Critchfield, 2015a, b; Dixon, Reed, Smith, Belisle, & Jackson, 2015; Fisher et al., 2014; Granpeesheh et al., 2010).

The field of applied behavior analysis has seen exponential growth (Chezan, Layden, Barnhill, & Barthold, 2017; Pastrana et al., 2016), and this fact, coupled with the number of behavior analysis-based master's and doctoral training programs, illustrates the importance of and need for continued research and consideration of variables and issues relating to the education of behavior analysts. This special issue on the education of behavior analysts is composed of empirical-based studies that evaluated teaching procedures aimed at effective training of behavior analysts, surveys focusing on the content of training programs, and commentaries on topics pertaining to teaching and mentoring in behavior analysis. Several themes emerged in the articles, including (a) a focus on knowledge of basic principles of behavior analysis, (b) the direct application of operant-based principles in the teaching and mentorship of behavior analysis students, and (c) a strong emphasis on the meaningful application of behavior analysis.

Many of the commentaries included explicit assertions of the importance of prioritizing the teaching of basic principles and mechanisms and training on the application of those principles within behavior analysis teaching programs and mentorship models (e.g., Critchfield, 2018; Malott, 2018;

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Miltenberger, 2018; Pilgrim, 2018; Wacker, 2018). Further, both of the surveys (i.e., Chezan et al., 2017; Pastrana et al., 2016) and the empirical studies evaluated the effects of instruction-related independent variables on the acquisition of knowledge of basic principles and single-subject research design methodologies by behavior analysis students (Malkin, Rehfeldt, & Shayter, 2016; O’Grady et al., 2018; Paliliunas, Belisle, & Dixon, 2018). The common message across the majority of articles in the special issue regarding the emphasis on basic principles is notable and consistent with the radical behaviorist theoretical orientation that underlies behavior analysis. As a subdiscipline of psychology and a field that transverse multiple areas of research and application, behavior analysis is unique in its emphasis on and study of basic principles and mechanisms identified through the inductive approach to science that underlies the radical behaviorist theoretical orientation and philosophy of science (Chiesa, 1994). The importance of this aspect of teaching behavior analysts was clearly evident in the articles that composed this special issue. As Pilgrim (2018) stated, her “guiding principle then is to strive to arrange the conditions that can best shape a complete life-long behavior analyst, a radical behaviorist in the true sense of thoroughgoing (as opposed to, for example, a situation-specific purveyor of behavioral techniques).” Miltenberger (2018) articulated this point in terms of his approach to teaching and mentorship by stating, “If students are fluent in basic principles, they have a conceptual organizing framework that guides everything they do in behavior analysis. This can’t be overstated; without a strong conceptual foundation, behavior analysts have nothing but a bag of tricks.”

A second theme that emerged across many of the articles in the special issue, including commentaries (e.g., Bailey, 2018; Critchfield, 2018; Malott, 2018; Martens, 2018; Miltenberger, 2018; Pilgrim, 2018; Wacker, 2018) and empirical evaluations (Malkin et al., 2016; O’Grady et al., 2018; Paliliunas et al., 2018), was the effective application and embedding of behavioral principles and mechanisms within teaching and mentorship models for behavior analysts in training. Many authors of commentaries and empirical studies in the special issue alluded to the application of processes such as differential reinforcement, shaping, fading, rule-governed behavior, generalization, stimulus equivalence, noncontingent reinforcement, stimulus control, and other principles and mechanisms within their teaching and mentoring approaches. This “practice what we preach” approach to education and mentorship was exemplified by Wacker (2018), who stated,

The contingencies associated with clinical practice and applied research were the primary variables that shaped and maintained professional behavior. Mentorship

largely consisted of providing opportunities for students to maximize their encounters with these contingencies, and to deliver both contingent and noncontingent praise and support for engaging in tertiary-level clinical activities and translational research that helped as many kids as possible.

A third theme that arose among the different articles in this special issue pertained to the emphasis in teaching and mentoring on the meaningful and socially valid application of behavior analysis (e.g., Chezan et al., 2017; Critchfield, 2018; Malott, 2018; Miltenberger, 2018; O’Grady et al., 2018; Pastrana et al., 2016; Pilgrim, 2018; Wacker, 2018). An emphasis on the meaningfulness and social validity of behavior analysis and its associated practices has long been a feature of the field (e.g., Baer et al., 1968); the common reference to it within the context of teaching and mentoring behavior analysts by the authors of the articles in this special issue reflects this emphasis. In his commentary, Wacker (2018) stated that “the improvement in behavior with the kids we worked with” was one of two categories of “naturally occurring” reinforcers (along with the “collection of believable data”).

Three additional papers in this special issue provided additional analyses and insights regarding the topic of education and mentorship of behavior analysts. Two commentaries (i.e., Hayes, 2018; Rehfeldt, 2018) in this special issue provided analysis, reflection, and advice to future and current behavior analysts regarding aspects of functioning in the realm of academia. Hayes (2018) provided insight and analysis regarding the various competing contingencies (i.e., clearly specified contingencies and “ill-specified” contingencies) that operate in academia relating to teaching and research; Hayes also offered advice regarding the discrimination and navigation of those various competing contingencies that operate in the academic environment. Rehfeldt (2018) provided a narrative on her personal experiences and journey as a female professor, the challenges she encountered, and the approaches she used to address those challenges and provided astute advice, based on “lessons” she learned, to current and aspiring women in behavior analysis who work in academia or may do so in the future. Finally, Petursdottir and Carr (in press) provided an analysis of threats to internal, external, and construct validity pertaining to single-subject design experimental methodology (the primary method used in behavior analysis and the field’s natural sciences-based [Chiesa, 1994] approach to the identification of basic behavioral principles) from a group-design experimental perspective.

The purpose of the current special issue was to showcase research and commentaries pertaining to the education and mentorship of students in behavior analysis. I am deeply grateful to all of the authors and reviewers for their contributions to this special issue. I hope that individuals (e.g., university-

based professors, providers of clinical and educational supervision) who provide instruction in behavior analysis and/or mentorship of aspiring behavior analysts will benefit from the commentaries and research provided in this special issue.

Compliance with Ethical Standards

Conflict of Interest The author declares he has no conflict of interest.

Ethical Approval This article does not contain any studies with human participants performed by any of the authors.

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