Chapter 9
Ethics for Cultural and Community Applications of Behavioral Science

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In a research lab meeting, a faculty member and their students started to discuss ways in which behavior analysis might provide support to a population considered, by social norms, as disadvantaged. Specifically, the students were discussing ways in which behavior analysts might work with members of the population who were homeless. In the course of the discussion, the faculty member, while listening to their students' discussion, overheard phrases such as "those people," "that community," "we should do…," and other phrases and statements that suggested that their students somehow viewed their perspective, their assessment of the problem, and their solutions as superior to those of the members of the population considered disadvantaged.

The students came up with a number of innovative and interesting "solutions" clearly grounded in the principles of behavior science; however, not a single student started the point they were making or predicated their suggestions with talking to members of the population that they purported to "serve." What were the needs of the persons living in tent communities in Los Angeles? What were the primary concerns, needs, and troubles of the population the students were so eager to serve?

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Did the "solutions" they were providing meet those needs? Did they align with values of community members? The students were quick to "call out" others who had designed ineffective solutions, but based only on their lack of science or their failure to eradicate the "problem." But whose problem is homelessness, and if behavior analysts were to work with a population identified as such colloquially, how do we establish our ethical boundaries? Should there even be "boundaries?" How do we ensure that the members of said community are treated with dignity and respect? How do we ensure that we are not "treating" them but working ***with*** *them, or not working with them if they ask us not to? Why is it our business, anyway? What does ethics mean when behavior analysts work toward culture- and community-based research and interventions? Whose ethics are important?*

> Distinctions must be made between ethics as a field of study, ethical standards which control the behavior of members of the culture, and statements which purport to describe the events which control the ethical behavior of members of a community.
>
> —Krapfl & Vargas, *Behaviorism and Ethics.*

Ethics for Cultural and Community Applications of Behavior Science

Since Skinner's *Walden Two* (1948), *Science and Human Behavior* (1953), and "Why We Are Not Acting to Save the World" (1987), behavior analysts have grappled with how the science of behavior can be applied to produce large-scale change and to address issues of social and cultural importance (e.g., Chance, 2007; Dixon, Belisle, Rehfeldt, & Root, 2018; Leigland, 2011; Mattaini & Luke, 2014). Recently the interest among behavior scientists considering applications of behavior science to cultural and community phenomena has resurged. The problems explored are often framed as problems that involve *creating behavior change* for a large number of people producing a cumulative effect (i.e., a macrocontingency; Glenn et al., 2016[1]) or as those that go beyond individual behavioral contingencies and consider how behavior interlocks between two or more individuals, such as in cooperation (e.g., McElreath et al., 2005). Such applications of the science present a number of nuanced situations that require *collaboration* with stakeholders to solve *mutually identified* problems that arise from *environmental conditions*, and solutions that focus on improvement in population-level outcomes and equity (Fawcett, Schultz, Collie-Akers, Holt, & Watson-Thompson, 2016). The purpose of this chapter is to introduce, articulate, and elaborate on proposed ethical guidelines for behavior scientists engaged in culture- and community-focused research and practice.

The proposed ethical guidelines are grounded in the philosophy of radical behaviorism and aspire to engender and facilitate social justice. The authors acknowledge that their approach is not free from bias and assumptions that are culture-specific;

[1] Reprinted as Chap. 2 of this volume.

all ethics must occur in a context. Therefore, we approach the ethics of cultural and community applications of behavior science from a radical-behaviorist perspective, which is particularly well suited to support social justice (Moore, 2003). Radical behaviorism emphasizes both contextualism and pragmatism (Baum, 2005; Biglan & Hayes, 1996; Morris, 1988). Contextualism tells us that the learner (in this case, the individual members that constitute the group, community, or culture) is always right because history and context are strong determinants of behavior (Biglan & Hayes, 1996; Morris, 1988). Moreover, community-based behavior science researchers and practitioners work *with* those involved in ways that respect the participants' worldviews (Pepper, 1942). The pragmatic approach tells us that if something is working, continue to do it; one should not reject a cultural practice simply because it does not fit into their worldview or because it does not yet have evidence that they have judged satisfactory to support it (Biglan & Hayes, 1996). The ethical behavior scientist working on cultural and community issues behaves not as an "impartial speculator" who imposes their principles on all of society. Rather they support the highest levels of community well-being, as defined by the community, and strive to ensure that each individual "…has the same indefeasible claim to a fully adequate scheme of equal basic liberties…" (Rawls, 2001, pp. 42–43) such that no one falls below a certain level of advantage (Rawls) and such that there is equity in opportunities and outcomes for all (Fawcett et al., 2016).

The articulation of ethical guidelines for behavioral research and practice focused on cultural and community concerns will be accomplished by first discussing the origin and definition of ethics, followed by the history and evolution of ethics, morals, and values within behavior analysis more specifically. Then, we discuss challenges and guidelines for ethical culture- and community-focused behavior science research and practice. Guidelines were chosen, rather than rules or an ethical code, because establishing rules implies that ethical practices are static and absolute. This is not the case, in our opinion, especially for an emerging area that applies the concepts, logic, and assumptions of behavior analysis, cultural selection, behavioral systems analysis, community-behavioral psychology, and radical behaviorism to culture- and community-based phenomena, issues that often encompass some of the most seemingly impenetrable social problems.[2]

Ethics

Ethics are defined as the "moral principles that govern a person's behavior or the conducting of an activity" (Ethics, n.d.). The study of ethics has its origins in ancient Greek philosophy (circa 400–300 B.C.) with influences from Socrates, Plato, Aristotle, and others. Ethics as its own area of study came about only after societies began to form certain codes of conduct that specified how one must behave to avoid

[2] See ethics content in Chap. 17 for a somewhat different perspective.

punishment, such as the code of Hammurabi circa 1754 B.C. (Singer, 1985). In contrast to laws, which specify behavior and consequences, ethics is the discipline whose primary objective is to understand what is right and wrong (as opposed to legal and illegal). Instead of focusing on laws regarding behavior and consequences, ethics examines what types of behavior *should* be considered right or wrong, good or bad, and why (Singer, 1985).

Ethics, Morals, and Values in Behavior Analysis

Philosophical and Conceptual Treatment of Ethics

Skinner (e.g., 1948; 1953) was one of the first to provide a behavior-analytic interpretation of ethics, morals, and values. He asserted that we learn to help others through the contingencies that are arranged through our social environment and that we continue to help others because it increases the probability of the survival of the species (Skinner, 1975). Skinner (1975) drew an important distinction between the radical-behaviorist perspective on ethics and the perspective on ethics of society at large, noting that "[the behavior analyst] helps people by arranging conditions under which they get things rather than their receiving them gratis" (p. 9). Adopting scientism, he took the stance that the philosophy of science, as a way of knowing, surpassed any other way of knowing. He considered values as nothing more than individual reinforcers defined by the verbal community (or society more generally); for Skinner (1971), values were acquired and shaped by a common verbal community. Morals (often associated with social control established and maintained by religion) and values (associated with the more general social environment or culture), then, according to Skinner (1953, 1971), are simply verbal statements that convey what is "right" or "wrong" or "good" or "bad." Adopting a naturalistic ethics, meaning that ethics and values can be understood scientifically (Vogeltanz & Plaud, 1992), Skinner advocated for the science of behavior to be used for the "good" of society. A number of other scholars within behavior analysis have addressed ethics, values, and morals from a philosophical and/or conceptual standpoint (e.g., Malott & Trojan Suarez, 2003; Newman, 1992; Newman, Reinecke, & Kurtz, 1996). Behavior analysts will agree to varying degrees with the conclusions reached by these authors; the examples that are given serve to illustrate the rich dialogue among behavior analysts regarding the conceptual and philosophical treatment of ethics.

From Ethical Naturalism to Practical Ethics

Shortly after Skinner (1938) began articulating his findings from nonhuman research in the experimental analysis of behavior (EAB), he and others began applying the principles and techniques to human behavior (e.g., Baer, Wolf, & Risley, 1968;

Fuller, 1949). These behavior analysts, who came to be called "behavior modifiers," applied the principles and techniques to human behavioral problems, such as smoking (Azrin & Powell, 1968), delusional speech (Lindsley, 1956, 1960), mutism (Isaacs, Thomas, & Goldiamond, 1960), and more. These "behavior modifiers" sought to help people with the science of behavior and demonstrated the efficacy of this approach in improving people's lives. At a certain point it became clear, though, that the application of behavior-analytic principles and procedures discovered in the laboratory to problems involving humans could be misused for various reasons, and the need for ethical oversight emerged (Bailey & Burch, 2016; Martinez-Diaz, Freeman, Normand, & Heron, 2007).

Practical Ethics

Numerous behavior analysts have addressed the ethics of practice in applied behavior analysis (ABA; e.g., Bonow & Follette, 2009; Brodhead & Higbee, 2012; Hayes, Hayes, Moore, & Ghezzi, 1994; Krapfl & Vargas, 1977; Melo, Castro, & de Rose, 2015; Miron, 1968). Malott (2002) pointed out that experimenters of ABA often conduct research with humans who have been diagnosed with developmental disabilities, and that when the research is done, the participants are left "none the richer" (p. 105). He proposed that a requirement of a "social conscience" (Malott, 2002, p. 106) be added before accepting a research project as a thesis, dissertation, or publication. In other words, he suggested that the researcher should provide treatment that results in gains for the participants, and not conduct research with specific populations solely for the researcher's gain (i.e., degree or tenure requirements).

From Ethical Guidelines to Rule-Based Ethics

As more behavior analysts started to practice, the mistreatment of individuals receiving behavioral interventions and the misapplication of behavioral techniques drew more attention to applications of the natural science of behavior to improve the human condition (Bailey & Burch, 2016). Over some years, such misuse contributed to the development of a regulatory body both to oversee ethical practice of behavior analysts and to identify guiding principles, ethical guidelines, and eventually a code of ethics for Board Certified Behavior Analysts (BCBAs). This regulatory body is known as the Behavior Analyst Certification Board, Inc. (BACB®), and the code of ethics is known as the Professional and Ethical Compliance Code for Behavior Analysts (hereafter referred to as the BACB® Code; BACB, 2014).[3] The BACB® Code guides the ethics of ABA practice.

[3] It should be noted that the authors of this chapter do not support the term compliance as it suggests that ethics is a practice of following a set of rules; however, the term is used here to describe the practices currently adopted by the profession though not necessarily reflective of the science.

Today, the BACB® Code is largely rule-based, specifying what the applied behavior analyst should do and should not do. The jump that behavior analysts have made as a discipline, and particularly as a profession, from naturalistic ethics to rule-based ethics (Rosenberg & Schwartz, 2018), has exerted some control over and perhaps restricted our scope of practice. The BACB® Code largely applies to practice with individual clients and those in direct contact with them, and to research in controlled settings. It does not easily translate to practice or research in the community, to large-scale behavior change, to work mitigating social issues, to understanding culture, or to behavioral systems analysis. Exclusive reference to the BACB® Code also restricts the content regarding ethics to which aspiring behavior scientists might be exposed; coursework is largely focused on a narrow scope of rules that suggest what is or is not allowed in behavioral practice. In addition, the code has evolved in the context of a science of behavior that has historically valued control over behavior as an ultimate goal rather than collaboration and social justice like we, and others (cf., Fawcett, 1991), argue are equally or even more important. The confluence of these variables requires that there be an explicit focus on the ethical considerations that behavior scientists working on culture- and community-focused phenomena face.

Subject Matter and Situational Factors in Applications of Behavior Science to Culture and Community

Behavior scientists working in applications to culture- and community-based phenomena are confronted with a number of situations less common to behavior scientists working in individual behavior change. Cultural and community applications of behavior science often involve taking behavior analysis to scale and/or collaborating with community members to produce behavior change for a large number of individuals. This is accomplished by facilitating contingencies that support adaptive patterns of responding among several individuals. The behavior scientist working on cultural and community issues collaborates with stakeholders to empower individuals to behave in ways that allow all community members to have input and influence even if doing so involves costs for some members (Gutierréz, 1973).

Contingency arrangements often conflict with those that produce the best outcome for the individual(s) behaving (e.g., Borba, Tourinho, & Glenn, 2014, 2017). The contingencies that concern the cultural/community behavior scientist support changes in the behavior of more than one person, often manifested in the establishment of rules, laws, or policies (e.g., Fava & Vasconcelos, 2017; Todorov, 2005, 2009). This type of research and practice requires an analysis of the relevant systems, the interdependencies among them, and the competition between them (e.g., Biglan, 1995; Mattaini, 2013). These scenarios subject the behavioral scientist/practitioner to frequent encounters with competing contingencies resulting from differences in the morals and values of the agents who may hold more power over

contingencies (including the behavior scientist/practitioner), the community members, and other stakeholders. Ethical research and practice in behavior science applications to culture and community requires plans for avoiding unintended consequences and accounting for concurrent and competing contingencies that operate over time as changing contingences often affect the behavior of a number of individuals.

Even though the ethical considerations facing behavior scientists working on culture- and community-focused issues are nuanced, they are also relevant to applied behavior analysts working in individual behavior change. Individuals are members of communities and participate in numerous social systems (e.g., families, education systems, organizations, etc.). Some of the challenges and considerations for conducting research and practice articulated before there were formalized ethical guidelines or the BACB® Code (e.g., Fawcett, 1991; Goldiamond, 1974/2002) illustrate this point.

Nonlinear Analysis and Competing Contingencies

Goldiamond (1974/2002) wrote about the analysis of social contingencies. He discussed ethical and legal issues in relation to behavioral interventions for individuals who are most susceptible to coercion, such as individuals with disabilities, children, and the elderly. Goldiamond described Goffman's (1961) "total institution," or a social system in which the barriers that typically separate environments of living, working, and playing do not exist, such that these environments overlap, and the contingencies interact and conflict. He went on to note that total institutions might violate individuals' constitutional rights. Thus, an analysis of the social contingencies under which such institutions operated, including individual behavioral contingencies and the contingencies outside of the facility (i.e., contingencies external, though influential to the system and/or those occurring for the members of the community), is imperative. Goldiamond's (1976a) analysis illustrates the recursive nature of the two sets of contingencies and how the impact and outcomes at the two levels can be qualitatively different, emphasizing the idea that practices considered "ethical" at the individual level (i.e., the practitioner-client relationship) may be seen as "unethical" when the community level is jointly considered and that the opposite may also be true. Goldiamond (1975) also formulated the nonlinear analysis of behavior, later applying it to the analysis of social systems (Goldiamond, 1984). He argued that any ethical analysis that focused on only one level without consideration of its effect on the other levels, and vice versa, would be inadequate as it can put members of some communities at risk for coercion (Sidman, 2001).

Goldiamond (1976b) considered the contingencies of freedom and coercion in terms of the availability of *genuine* choices and the types of consequences attached to the choices. Coercion is more severe when there is no genuine choice and the consequence contingent on behavior is critical. A consequence is considered critical if a community has restricted access to it and it is preferred over the community's other choices (Goldiamond, 1976b). If behavior scientists working in culture and community hold access to certain resources that the members of the community or

culture can access only by participating in the research, or the behavior scientist presents their approach as the "only good approach," then the members of the culture or community have no degrees of freedom and, therefore, no genuine choice. Prisoners, for example, may consent to research to avoid boredom, meet someone new, or appear cooperative so they will be treated better (Moser et al., 2004). To avoid coercive practices in research and practice, the behavior scientist must consider the degrees of freedom of the potential participants and community members (see also de Fernandes & Dittrich, 2018) and understand that multiple contingencies operate simultaneously for different entities. Goldiamond's (1974/2002, 1976a, 1976b, 1984) constructional approach and nonlinear analysis provide ways to mitigate the aforementioned problems and to increase protections for research participants and professionals from unintended consequences that impact the culture or community.

Community Research and Action

Fawcett (1991) described the major practical and ethical challenges of applying the rigorous, experimentally controlled, individual-subject techniques of behavior analysis to research and practice in the community. He said that insisting on the level of control demanded by researchers and practitioners at the level of individual behavior limits the work that can be done at the community level. Fawcett suggested that behavior analysts embrace new ways of creating change that are highly beneficial for those involved, even though the methods and interventions may demonstrate less experimental control. He even went so far as to say that "the standards for experimental control that were refined in laboratory contexts encourage investigators to target people who cannot avoid our interventions" (Fawcett, 1991, p. 622), similar to the concerns raised Goldiamond (1974/2002) and Malott (2002). Fawcett noted that behavior analysts have been most comfortable in a research space that is more similar to the operant-conditioning chamber. However, the behavior scientist working in community settings also needs to consider the behavior of the politicians, service providers, and the contingencies that maintain the problems (often found in the systems' contingencies; e.g., Baer, 1992; Ellis & Magee, 2007). One specific recommendation Fawcett (1991) made was to include people in power as "participants" in our research as opposed to "silent, subservient targets of research" (p. 623).

Fawcett (1991) outlined challenges and values to guide community action and research. The goals of community research and action include contributing to the knowledge base about contingencies in the context of "open community settings, and…facilitating the development of individuals and communities consistent with their own goals" (Fawcett, 1991, p. 623). He suggested avoiding "colonial" (or researcher-dominated) relationships with research participants by *collaborating with participants* in the identification of the problem and the potential solutions. He also suggested emphasizing benefits, not just risks, in the informed consent process.

Including those in power and ensuring all community members have equal representation helps to accomplish this goal. Fawcett suggested that behavior analysts working in community settings take a strength-based approach and examine metacontingencies when developing interventions. He also suggested being open to a strategy that strives for smaller wins that can add up to large gains, as immediate large-scale improvements are unlikely to occur. A final challenge Fawcett discussed is the competing contingencies that produce and maintain the behavior analysts' behavior, such as publication requirements that value experimental rigor over community significance. He suggested that "a modified set of guidelines would support a tighter coupling of research and action, better optimizing the interests of client audiences beyond the academic discipline" (p. 628). The values that Fawcett offered are that:

1. Researchers should form collaborative relationships with participants.
2. Descriptive research should provide information about the variety of behavior-environment relationships of importance to communities.
3. Experimental research should provide information about the effects of environmental events on behaviors and outcomes of importance.
4. The chosen setting, participants, and research measures should be appropriate to the community problem under investigation.
5. The measurement system must be replicable, and measures should capture the dynamic or transactional nature of behavior-environment relationships.
6. Community interventions should be replicable and sustainable with local resources.
7. Community action should occur at the level of change and timing likely to optimize beneficial outcomes.
8. Researchers should develop a capacity to disseminate effective interventions and provide support for change agents.
9. Results should be communicated to clients, decision-makers, and the broader public.
10. Community research and action projects should contribute to fundamental change as well as understanding.

(Reprinted with permission from Table 1 of Fawcett, 1991, p. 633).

Aspirational Guidelines for Ethical Application of Behavior Science to Culture and Community

> Every man must decide whether he will walk in the light of creative altruism or in the darkness of destructive selfishness.
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> —*Rev. Dr. Martin Luther King, Jr.*

Values

Fawcett's (1991) values continue to have relevance to behavior scientists working in culture and community settings. In the pressing societal concerns of today, additional guidelines are needed to help behavior scientists navigate situations that involve conflicting morals and values, human rights, how behavior change in one system impacts another system, how cultural practices are established and maintained, and how to predict and consider the unintended consequences of our interventions. The following recommendations are influenced by the body of literature reviewed and inspired by the experiences and examples set in other disciplines, our own personal and professional experiences, and the behavior-analytic research that has formed the basis of its applications to culture and community.

Although behavioral scientists and practitioners have been working in cultural selection (e.g., Glenn, 1986), behavioral systems (e.g., Opulente & Mattaini, 1993), and community change for decades (e.g., Fawcett, Seekins, Whang, Muiu, & Balcazar, 1984), there are few resources for ethical research and practice in these areas. The current generation of behavioral scientists and practitioners working in culture and community have a unique opportunity to continue to refine integrative values, to collaborate with stakeholders in the corresponding cultures and communities, and to establish and sustain contingencies that will support individual behaviors and cultural practices that align with aspirational and core values. We propose that these values are *creative altruism* and *social justice*. They are aspirational in that they refer to a desire to achieve "something higher than oneself" (Aspiration, n.d.). Community and cultural applications of behavior science should be conducted to help others, not to achieve personal gain. Creative altruism and social justice are values that aim to achieve such a goal.

Creative Altruism

Altruism is helping others even when there is no direct benefit to the person doing the helping. Creative altruism goes beyond altruism in that it is helping others, but for the explicit purpose *of improving the world*. Creative altruism has been contrasted with selfish behavior, which typically results in the world changing for the worst (King, 1963). Coined by Sorokin, the founder of Harvard University's Sociology Department (Weinstein, 2004), the term creative altruism appears in the work of applied sociologists, who believe that we now know enough about the negative effects of the management of human affairs to apply our knowledge for the better, and that altruism is a strategy to do this (Weinstein, 2000). Creative altruism is contingency-shaped; it is explicitly reinforced when the cultural contingencies and shifts in relational responding emphasize its value and reinforce patterns of behavior and cultural practices indicative of its aims.

Creative altruism is consistent with Fawcett's (1991) suggestion that behavior analysts working in community settings remain open to potentially beneficial techniques even if they lack conventional experimental control. In fact, Gruber (1997)

contrasted creative altruism with the typical scientific endeavor that seeks simply to gain control over nature, rather than seeking to identify what types of control over nature are beneficial. He stated that there is relatively little effort aimed at understanding how to identify what changes *should* be made and what changes will be disastrous, in contrast to the extensive effort aimed at controlling one's subject matter. Creative altruism, as an intentional plan to benefit individuals and communities, can be rigorous, in terms of both experimental control and in collecting data that point to the desirability and benefits of the change. A point highly salient to the behavior scientist, communities should not be used to do science for the sake of science or for personal gain. Change at the community level should occur only if there is a reasonable chance that it will help the people it is going to impact. This statement is a guideline that should be emphasized to our students and a practice that should be explicitly reinforced in our scientific and professional communities.

Gruber (1997) noted that creative altruism requires a level of perspective taking that is not commonly taught. It requires us to restrain our desire for personal aggrandizement while envisioning how much better the world could be. Like Skinner (1953), Gruber stated that technology progresses at a faster rate than our ability to monitor its effects; the goal is to do more, faster, and there are not enough resources and rewards to encourage a focus on creativity, wisdom, or moral responsibility. Conversely, ethical behavior scientists and practitioners working with culture and community assess their technology by measuring its effects, such as the number of people falling below the minimum level of advantage (Rawls, 2001) or the equity of outcomes achieved (Fawcett et al., 2016) before and after the intervention is implemented.

As a core value, creative altruism should guide the work of cultural and community behavior scientists. However, achieving creative altruism in research and practice in culture and community is not easy due to the competing contingencies between helping others and personal gain (Goldiamond, 1974/2002, 1976b). One solution is to facilitate environments in which the contingencies of helping people do not conflict with the helping agents' attainment of critical consequences (e.g., employment, tenure). Indeed, we might even reinforce helping people with explicit and perhaps critical consequences. Gruber (1997) states

> Creative altruism is not something you can do alone. You cannot simply do something for people, you must do it with them. That means you need them; that means you have to understand their point of view and their needs as they experience them. You have to have the humility to see what is good for them, not what you would like if you were in a similar situation. In the long run the goal is to replace your help with self-help by the people in question. They have to be engaged in the actual work that needs doing—the redistribution of human resources. Thus, creative altruism requires cooperation (p. 470).

Social Justice

Creative altruism applies to everyone, but it is especially relevant to our explicit commitment to social justice. All people have a right to be free, and are entitled to equal dignity and rights. These entitlements are upheld through creative altruism in

the "spirit of brotherhood" (United Nations Declaration of Human Rights, 1948). Behaviorism offers an alternative to the traditional view of mentalism, which attributes certain repertoires to some characteristic or disposition of the individual (Moore, 2003). Behavior analysis, therefore, offers a path to social justice, recognizing that repertoires develop because of the contingencies existing in and constructed by the physical and social environment. The behavior scientist working on culture- and community-focused phenomena is tasked with the responsibility to collaborate with community members to identify and analyze the cultural practices and contingencies that sustain injustices, and to reconstruct the social environment to instead promote justice and equity for all of society.

As a core value, social justice manifests itself in the behavior scientist's "personal responsibility to work with others to design and continually perfect our institutions as tools for personal and social development" (Center for Economic and Social Justice [CESJ], 2016, p. 1; Wilhite, 2016). As the behavior scientist collaborates with community members to understand the contingencies responsible for social injustices such as poverty, discrimination, ineffective instruction in public schools, gerrymandering, etc., they are further challenged to influence cultural practices to reduce such disparities in a way that will support and sustain those modified cultural practices. One way in which culture- and community-focused behavior scientists can succeed in their commitment to social justice is to work to reduce or eliminate the power differentials that result in unequal resource distribution. Paul Farmer's efforts to reduce structural violence (the harm inflicted on certain populations by specific social institutions; e.g., Rylko-Bauer & Farmer, 2016), is but one example to emulate. The efforts of Fawcett et al. (2016) to improve community health and reduce health disparities is another.

The adoption of social justice and creative altruism as aspirational core values in culture- and community-focused behavior science is challenging, yet obligatory. Beneficence to humankind is inherent to ABA (Baer et al., 1968) and is brought into action through dynamic practices such as the measurement of social validity and invalidity (e.g., Kazdin, 1977; Schwartz & Baer, 1991; Wolf, 1978). Historically, behavior scientists and practitioners have contributed to the empowerment of humankind, facilitating critical skills such as choice-making (Bannerman, Sheldon, Sherman, & Harchik, 1990), self-advocacy (Kohr, Parrish, Neef, Driessen, & Hallinan, 1988), and assertiveness (Leaf & McEachin, 1999). Recently, some have highlighted the need for behavior analysts to improve their own critical skills such as compassion and empathy (Taylor, LeBlanc, & Nosik, 2018) and cultural awareness (Fong, Catagnus, Brodhead, Quigley, & Field, 2016). Miller, Cruz, and Ala'i-Rosales (2019), for example, called for an examination of ABA practices within the larger cultural context emphasizing responsiveness to diversity and social justice. They assert that executing a social justice mission requires collaboration with other disciplines; identification and amelioration of social injustices; and the development of key repertoires including cultural competence, responsiveness, and humility. Such recommendations are equally applicable to research and applications of behavior science to culture and community.

Key Repertoires

The following recommendations embrace the values of creative altruism and social justice and indicate the behaviors and goals that should guide behavior scientists in working in culture, systems, communities, and large-scale behavior change.

Collaboration

Defined as "to work jointly with others or together especially in an intellectual endeavor" (Collaborate, n.d.), collaboration takes on two distinct roles: interdisciplinary collaboration and collaboration with participants and community members.

With Other Disciplines

Malagodi (1986) argued that failure to collaborate with successful disciplines is antithetical to radical behaviorism because it is antithetical to pragmatism. He said that behavior analysts must collaborate with other social-science disciplines if behavior analysis is to achieve its full potential in helping to improve society. He called specifically for collaboration with cultural anthropologists who subscribe to cultural materialism (Harris, 1979). Cultural materialists believe that selection by consequences plays a causal role in cultural evolution, analogous to reinforcement and punishment in the behavior of individuals. Malagodi suggested that behavior analysts' worldview should include cultural analyses, along with philosophical and behavioral analyses, and that the three components should be interdependent. He even went so far as to recommend "that principles derived from compatible social-science disciplines be incorporated into radical behaviorism" (Malagodi, 1986, p. 1).

Applications of behavior science to cultural and community-based phenomena may be inherently interdisciplinary. However, interdisciplinary collaboration may be difficult because "...the diverse cultures, norms, and language of each profession make the process of interdisciplinary collaboration resemble the bringing together of inhabitants from foreign lands" (Bronstein, 2003, p. 302). Behavior scientists have numerous technical terms, some from lay language and adapted to behavior science; they speak in those terms all too often when addressing laypersons and professionals from other disciplines (e.g., Bailey, 1991; Critchfield et al., 2017; Foxx, 1996; Lindsley, 1991), which may hinder interdisciplinary collaboration. Behavior scientists also have an aversion to mentalism or explaining behavior on the basis of mental events (Moore, 2008). Behavior scientists who cannot move past their aversion to mentalistic explanations and communicate with professionals and community members who espouse them will also have difficulty with interdisciplinary collaboration.

Interdisciplinary work requires consideration of multiple organizing frameworks to approach the subject matter (e.g., general systems theory, behavioral systems

analysis, cultural selection, behavioral community psychology, behavioral ecology) and the adoption of research strategies and intervention tactics from other disciplines (e.g., Mattaini, 2019). Collaboration with other disciplines is especially relevant for behavior scientists working on culture and community issues who seek to answer questions for which other disciplines may be helpful in providing information about the specific problem (e.g., poverty), population (e.g., youth who are at risk), or setting (e.g., prisons). Those seeking to mitigate significant social issues are also often facing wicked problems (Rittel & Webber, 1973) or super wicked problems (Levin, Cashore, Bernstein, & Auld, 2012). By definition, wicked problems like poverty, education, climate change, etc. require the combined efforts of members of multiple disciplines due to the complexity of the problem and the interconnected nature of the problems. Interventions aimed to address one social problem will likely affect another social problem. Mattaini and Aspholm (2016) stated that "behavioral systems scientists and students therefore would need to mine existing literatures, often in collaboration with other disciplines, to develop credible hypotheses regarding the behavioral systems dynamics sustaining major problem configurations and those required to construct genuine alternatives" (p. 114).

Behavior analysis, as a young discipline in the area of community intervention, may experience resistance from and toward other disciplines, which can delay the change that is needed to sustain our communities and cultures. However, our values, creative altruism and social justice, and the pragmatic philosophy of radical behaviorism, can help us navigate through this resistance, as can partnering with other disciplines and learning from their example. Social workers, for example, have long faced the challenges associated with the explicit need for interdisciplinary collaboration, and there is much behavior scientists can learn from their work in this area. Behavior scientists working on cultural- and community-based phenomena would benefit from conducting a concept analysis (Tiemann & Markle, 1978) of the core components of models adopted by other disciplines and incorporating coursework and practical training experiences for aspiring scientists and practitioners to develop these competencies.[4]

With Participants and Community Members

An important consideration for behavior scientists working in culture and community is to understand and follow the "ethical standards that control the behavior of members of the culture" (Krapfl & Vargas, 1977, p. vii). The communities we strive to support are often subject to the contingencies arranged by, or that at least favor, surrounding dominant cultures (Goldiamond, 1974/2002, 1976b; Skinner, 1953). It is important that the behavior scientist working on culture- and community-focused phenomena view the morals, values, and practices within a culture or community as attributes that reflect a unique history of learning and identity and are therefore to be

[4] See also Chap. 17 in this volume.

honored and protected. Fawcett (1991) insisted that behavior analysts working in communities *collaborate with* the community members to ensure the participants' and researchers' perspectives mutually define research questions, goals, and interventions. "Individuals are the experts in the data and conditions of their own lives" (Goldiamond, 1976b, p. 30); even "problematic" practices are outcomes of the contingencies in effect in the culture or community (Goldiamond, 1974/2002).

Effective behavior scientists working in culture and community build nonhierarchical relationships with participants and community members. Participation and roles are based on one's knowledge or expertise (e.g., Henneman, Lee, & Cohen, 1995). Behavioral community psychology's extensive work in participatory approaches to identify community needs and resources (e.g., Watson-Thompson et al., 2015; see also Chap. 14 in this volume) and building and sustaining collaborations in community partnerships (e.g., Viola, Olson, Fromm Reed, Jimenez, & Smith, 2015) provide excellent resources for behavior scientists working in culture and community.

Perspective Taking

Collaboration, regardless of with whom the behavior scientist is working, requires taking multiple perspectives. This requires a sophisticated, culturally sensitive repertoire to ensure that the perspectives, morals, and values of all members of the culture or community are embraced in the practices that result from this collaboration.

Individual

Many radical behaviorists who have studied the philosophy of science believe that one cannot objectively evaluate a person's worldview from outside that worldview (Pepper, 1942). The goal for behavior scientists working in culture and community is to be able to hear, consider, and respect (even if in disagreement with) another's perspective. Oftentimes, scientists or practitioners working on culture- and community-based phenomena may not have a shared history or experience with the members of the culture(s) or community(ies). The behavior scientist who is not a member of the culture or community likely takes the etic perspective in that they are seeking an understanding, from a scientific perspective, of the environmental variables responsible for creating and maintaining a cultural practice. Community members themselves, however, explain their practices from the emic perspective (Harris, 1979). These two perspectives, while equally important, may conflict, though both perspectives may offer important information in identifying problems and selecting and implementing interventions.

Multiple Perspective Taking

Kidder (1995) discusses right vs. right ethical dilemmas that involve multiple stakeholders. He describes four commonly encountered ethical dilemmas: truth vs. loyalty, justice vs. mercy, short-term vs. long-term, and individual vs. community. Most relevant to the current discussion are the short-term vs. long-term and individual vs. community perspectives, which might also be expanded to dilemmas that one encounters when the perspective of one group (e.g., homeless community) differs from that of another group (e.g., merchants or the larger community). An individual versus community paradigm illustrates the conflict between doing what is best for one individual and doing what is best for the community. A short-term versus long-term paradigm illustrates the choice between a course of action that results in a small, immediate impact and a course of action that produces long-term gains, perhaps with some short-term loss. These conflicting perspectives are apparent in many of the social problems addressed by behavior scientists working in culture and community. For instance, one can readily see how different strategies that have been employed to address homelessness could be considered "right." A course of action that advances the perspective of providing the most gain for the individual is one like "Host Home" in which families host individuals who are without a home in their homes while they find work, financial stability, etc. (Scott, 2018). The "Homeless Garden Project," conversely, emphasizes the benefits for the community. A community garden where community members and students work side-by-side benefits the entire community providing fresh produce, employment transition services, and job training for the homeless members of the community (Holloway, 2015). In contrast, a homeless shelter would offer a course of action that addresses the short-term needs. Actions toward the implementation of any of these programs are "right" in that they offer strategies that may mitigate the needs of the homeless and/or the community, but one program may seem more "right" depending on the perspective one takes. Effective behavior scientists develop the skills to consider right vs. right perspectives and far-reaching consequences—intended and unintended.

Cultural Humility

Behavior analysis has its roots in Western Judeo-Christian norms (Krapfl & Vargas, 1977) and is marked by WEIRD tendencies (Western, Educated, Industrialized, Rich, and Democratic; Henrich, Heine, & Norenzayan, 2010). According to Ulman (1983), "because behavior analysis developed within the context of bourgeois ideological hegemony, its growth as a comprehensive account of social behavior in capitalist society has been profoundly stunted" (p. 23). Behavior scientists serve clients and study participants from diverse groups and cultures and oftentimes find themselves in positions in which cultural context dictates one response and the BACB® Code requires another (see Rosenberg & Schwartz, 2018). Behavior scientists

working on culture- and community-focused issues may experience these conflicts even more frequently.

Most graduate training programs in behavior analysis have courses on ethics as they are required by our governing bodies, but few present-day students of behavior analysis (or students from other disciplines more generally) study ethics or philosophy in their own right. As a result, students with a strong scientific repertoire may lack the ability to conceptualize and analyze social issues that have been plaguing humanity for decades from a philosophical or theoretical perspective (Fryling, 2013). This is further compounded if behavior analysts struggle with cultural humility. Cultural humility "incorporates a lifelong commitment to self-evaluation and critique, to redressing the power imbalances in the physician-patient [for example] dynamic, and to developing mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations" (Tervalon & Murray-Garcia, 1998, p. 117). Ethical rigidity compounded by low cultural humility engenders adherence to rules that may be culturally insensitive (such as refusing to give and to accept gifts from clients or recommending an expensive set of teaching stimuli to a less economically advantaged family). Adherence to an inflexible set of ethical rules can have dire consequences for intervention acceptance (Wolf, 1978), the development and maintenance of healthy therapeutic relationships (Taylor et al., 2018), collaboration (Fawcett, 1991), and the development of prosocial behaviors that foster the advancement of cultures and systems (e.g., Biglan & Hinds, 2009). As a result, many behavior analysts may be ill equipped to independently tackle the complexities of ethical decision-making necessary for work on cultural and community concerns.

Applications of behavior science to culture and community are progressing toward understanding the environmental controlling variables that lead to imbalanced power differentials exerted through the control and establishment of contingencies by controlling agencies. The contingencies that control the ethical behavior of behavior scientists and practitioners share some of the same difficulties facing the constellation of contingencies at play in society more generally (Fawcett, 1991). Notably, these controlling contingencies tend to be sustained by the dominant culture. However, the cultures and communities we serve are often not representative of the larger dominant culture and the ethical guidelines and framework are less clear. The ethical dilemmas faced by behavior scientists might be framed as conflicts similar to those explored in the experimental work related to ethical self-control, in that what is good for the individual (behavior scientist) may not be what is good for the community (Borba et al., 2014, 2017). Both perspectives are right because each response supports a different value. The ethical dilemma occurs when values conflict (Kidder, 1995). Because our behavior-analytic values have been predominately constructed from Western Judeo-Christian norms and cultural practices, "the codification of its controlling practices" (Skinner, 1953, p. 338) is culturally biased. Behavior scientists working with cultural and community issues must consider how their values have been shaped and how those values influence what they do and how they treat people.

Developing Sustainable Projects

Luke and Alavosius (2012) defined sustainability as "the features of a practice or product that meet the current needs of the population while not hindering the ability of future populations to meet their needs" (p. 55). Even though not all projects need be focused on the long-term or sustainability to be considered valuable, sustainable projects are those that are replicable and can maintain after the research has been completed given only the local resources (e.g., Fawcett, 1991; Fawcett, Mathews, & Fletcher, 1980). Sustainable projects empower communities; that is, they enable the community to access more resources or other benefits through their own behavior, with less or even no reliance on outside sources. They require intentional collaboration and perspective taking to ensure that all stakeholders' values are taken into account. However, some projects cannot continue without the support of an outside agent, or they make the community worse off than it was before. For example, Kelly (2009) reported on the construction of water points (locations where people could access water) in Africa. The water points that donors, governments, and nongovernmental organizations constructed in rural Africa were not maintained in the absence of their further involvement. These water points became useless or in some cases hazardous, costing approximately $360 million to remediate. The water points were often built without consulting community members, who were ultimately left with new water points but without the resources to maintain them.

Conversely, Engineers Without Borders (EWB), a model for sustainable projects, was founded to address the need for "citizen engineers" (Amadei, Sandekian, & Thomas, 2009, p. 1088) and might serve as a model for applications of behavior science to culture and community. Citizen engineers develop sustainable solutions to geopolitical and economic issues worldwide. They collaborate on interdisciplinary teams, working together to design and implement solutions for the future, developing long-lasting solutions without doing any harm or creating unnecessary burden. The approach taken by EWB can guide scientists in their design of sustainable projects. Projects designed to be sustainable can be judged a success only when the researchers are gone from the community for a certain amount of time and the projects are maintained by the community members. This outcome can be achieved through capacity building or "education, training, empowerment, and the integration of economic mechanisms" (Amadei et al., 2009, p. 1090), a strategy that is consistent with many of Fawcett's (1991) values.

Summary

The key repertoires suggested in this section are deliberately indeterminate. We do not propose specific rules for the reasons previously discussed. In addition, Fawcett (1991) makes explicit suggestions for conducting ethical community research and practice, and we have also presented his recommendations. We do, however, strongly encourage instructors of ethics and those supervising and mentoring students and aspiring behavior scientists to create opportunities for their students and

mentees to develop the key repertoires described here, as well as to adopt the aspirational core values of social justice and creative altruism. When evaluating the ethics and other merits of a research or intervention project, the behavior scientist should assess whether the project serves the values of social justice and creative altruism, as well as whether the project (in all stages) relies on collaboration, especially with community members, and is evaluated from multiple perspectives. The assessment should determine the extent to which collaboration and perspective taking demonstrate cultural humility and whether the project will sustain after the behavioral researcher or practitioner leaves. Instructors and mentors should encourage thoughtful analysis and robust discussion of checklists and yes/no items, with a focus on critical thinking and an eye toward conducting projects that use creative altruism to further social justice.

Closing Comments

Behavior analysis itself is a culture; we are responsible for the retrospective analysis of the contingencies we experience and for the prospective development of new frameworks that influence new contingencies for selection. Moving forward, the field is obligated to continually develop and change such approaches to behavior science and especially community practice. From a social justice perspective, the field is obligated to facilitate a more progressive, inclusive approach that benefits all of humanity. From a creative altruism perspective, the field is obligated to influence contingencies that support actions to make the world a better place.

The aspirational goals that we have articulated here are accomplished by building systems that (a) support ethical practices (e.g., Brodhead & Higbee, 2012); (b) promote an ethical culture (BACB, 2014); (c) build feedback loops between service providers and the recipients of services that diffuse power differentials between them and promote ethical practices and collaboration; and (d) develop ecological systems (Bronfenbrenner, 1979) that promote social justice, creative altruism, activism, advocacy, and accompaniment (see Footnote 4). After all, the cultures of behavior scientists and practitioners, including those who work with individuals, cultures, and communities, are the result of a culmination of the contingencies experienced and created by the individuals who are members of those cultures and communities. The ethical practices that are currently our dependent variables, will ultimately become our independent variables, promoting and sustaining those practices that we develop (Skinner, 1971).

As we move forward into the less chartered territory of applications of behavior science to areas of importance in culture- and community-focused assessment, intervention, research, and practice, we assert that behavior scientists must examine their own contingencies, the interlocking contingencies, and the metacontingencies of their own cultures and communities, always taking multiple perspectives and prioritizing collaboration as a preeminent practice. We must establish and sustain a culture that supports cultural practices that help others and improve the world. And, we should do this because it is the right thing to do.

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