

Developing the Cultural Awareness Skills of Behavior Analysts

Elizabeth Hughes Fong¹ · Robyn M. Catagnus² · Matthew T. Brodhead³ ·
Shawn Quigley⁴ · Sean Field⁵

Published online: 4 February 2016
© Association for Behavior Analysis International 2016

Abstract All individuals are a part of at least one culture. These cultural contingencies shape behavior, behavior that may or may not be acceptable or familiar to behavior analysts from another culture. To better serve individuals, assessments and interventions should be selected with a consideration of cultural factors, including cultural preferences and norms. The purpose of this paper is to provide suggestions to serve as a starting point for developing behavior analysts' cultural awareness skills. We present strategies for understanding behavior analysts' personal cultural values and contingencies and those of their clients, integrating cultural awareness practices into service delivery, supervision, and professional development, and becoming culturally aware in everyday practice.

Keywords Culture · Cultural awareness · Applied behavior analysis · Diversity

Skinner (1953) defined culture as variables “arranged by other people” (p. 419). That is, humans control contingencies of

Elizabeth Hughes Fong, Robyn M. Catagnus, and Matthew T. Brodhead shared first author

✉ Robyn M. Catagnus
rcatagnus@thechicagoschool.edu

¹ Arcadia University, Glenside, PA, USA

² The Chicago School of Professional Psychology, Chicago, IL, USA

³ Purdue University, West Lafayette, IN, USA

⁴ The University of New Mexico Medical Group, Albuquerque, NM, USA

⁵ Western Michigan University, Kalamazoo, MI, USA

reinforcement and punishment that affect the behavior and learned reinforcers and punishers of a person or a group of people. Culture may be further defined as “the extent to which a group of individuals engage in overt and verbal behavior reflecting shared behavioral learning histories, serving to differentiate the group from other groups, and predicting how individuals within the group act in specific setting conditions” (Sugai et al. 2012, p. 200). Distinguishable stimuli and response classes that occur in cultures include race, socioeconomic class, age, religion, sexual orientation, ethnicity, disability, nationality, and geographic context (Sugai et al. 2012). An individual's unique set of distinguishable stimuli and response classes are collectively referred to as an individual's cultural identity. One benefit of determining cultural identity is it can allow behavior analysts to develop an awareness of a client's personal cultural values, preferences (i.e., learned reinforcers), characteristics, and circumstances (contingencies at the third level of selection; Skinner 1981). There are possible benefits for society, too, such as to better guide assessment and intervention practices. By acknowledging the importance of culture, behavior analysts can help achieve socially meaningful goals such as reducing disparities in access to services and improving the quality of services for diverse populations in behavioral health systems (U.S. Department of Health and Human Services 2001).

Culturally aware behavior analysts should understand their own cultural values, preferences, characteristics, and circumstances and seek to learn about those of their clients. That is, behavior analysts should be aware about their own personal biases and how they compare to and may affect their relationship with their client. This awareness of both self and clients may be important because, as Spring (2007) suggests, evidence-based services require a combination of clinical expertise and knowledge of the client's preferences and learning histories. Behaviorally, cultural awareness may be defined as

the discriminated operant of tacting contingencies of reinforcement and punishment administered by a group of individuals. In other words, a behavior analyst who is culturally aware is able to identify the reinforcement and punishment contingencies that have been established by themselves, their colleagues, their family, and any other social group they may belong to or identify with. Behavior analysts' ability to tact contingencies for self and others may facilitate development of a behavior change program that is informed by their clients' specific cultural contingencies.

Further, cultural awareness may be important because behavioral patterns that are viewed as problematic in our own culture may be the norm in other cultures (Goldiamond 2002; Vandenberghe 2008). Consider the following example of a child who was referred for a functional assessment for "withdrawn" behavior. The behavior analyst and a special education teacher observed the student became "withdrawn" after receiving verbal praise. In fact, the student ultimately stopped engaging in any appropriate behavior which lead to the verbal praise. While collaborating with the family to gather data during the functional assessment, they determined that the student's "withdrawn" behavior occurred because of child's lack of comfort with receiving individual attention. In the child's culture, the whole (i.e., community) comes before the individual. However, neither the behavior analyst nor the special education teacher questioned their personal assumption that the behavior is inappropriate for the classroom or their preferences about how children should act after receiving praise. Because the student's withdrawn behavior is maintained by a lack of attention, the behavior analyst and special education teacher suggest administering praise privately. In this case, their lack of understanding about how the cultural contingencies support the client's "inappropriate behavior" may have resulted in a treatment recommendation that was incongruent with cultural values. However, a culturally aware intervention, which seeks understanding of client values, characteristics, preferences, and circumstances would honor the client's culture and allow the client to be successful in a given environment.

A thorough behavior analytic intervention may be effective with individuals across various cultures (Kauffman et al. 2008; Tanaka-Matsumi et al. 1996). However, skilled, thorough, and well-trained behavior analysts may not always consider client culture. When assessing an individual's or a group's behavior, behavior analysts often collect data about motivating operations, antecedents, behaviors, and consequences. However, common functional assessment data collection strategies and interview forms may not thoroughly explore cultural preferences and norms. Behavior analysts may consider the intersection of a cultural and linguistic context with the terms, concepts, and science of behavior analysis (Jones and Hoerger 2009). It is possible that, without information about cultural preferences and norms, behavior analysts may unintentionally provide less than optimal service delivery.

Consider an example of a behavior analyst who provided in-home and community services to the family of a child with severe autism. The family, to whom church is very important, attended a weekly three hour church service. The behavior analyst, who did not attend church and was not a religious person, failed to inquire in detail about the family's and child's experience at church. Eventually, the family specifically asked the behavior analyst to teach the child the necessary skills to participate in the church service. However, the behavior analyst still did not assign a high priority to teaching the child the skills needed for successful church attendance. The behavior analyst's choices demonstrated a lack of understanding of the client's values, characteristics, preferences, and circumstances. In contrast, a culturally aware behavior analyst may be aware that "the selection of target behaviors is an expression of values" (Kauffman et al. 2008, p. 254) and that parental expectations of children are likely controlled by cultural contingencies (Akcinar and Baydar 2014).

In addition to the previous two examples, being culturally aware may also increase the probability that behavior analysts will engage in behaviors that are socially acceptable to people from diverse cultural backgrounds. These behaviors include selecting culturally appropriate treatments (see Rispoli et al. 2011), recognizing that "parenting styles that are culture specific could lead to distinct behavioral consequences for a child" (Akcinar and Baydar 2014, p. 119), and implementing culturally appropriate language acquisition programs (see Brodhead et al. 2014). Cultural awareness could also ensure that behavior analysts treat service delivery as "always a two-way street" (Bolling 2002), meaning that the relationship between the behavior analyst and the stakeholders should include input about what cultural contingencies and values may contribute to an effective relationship and intervention.

Finally, increasing cultural awareness may also decrease the probability of behavior analysts expecting the clients they serve to conform to their own cultural and scientific values and contingencies. The science of applied behavior analysis (ABA) is a unique cultural system (see Glenn 1993). Given that the science of ABA inherently embodies a certain set of values such as a Westernized model of science and health care, the cultural values and contingencies of ABA may not always align with those of the client. As Bolling (2002) noted,

It is difficult for people in the US cultural mainstream, including researchers, to believe that there are any assumptions other than their own about how the world works, what a 'person' is, how we function, how time works, what feelings are, how to use language, what the goal of life is, how people interrelate, [and] how and where it is appropriate to show feelings or to seek help. (p. 22)

Awareness of cultural differences and similarities may allow for programmatic modifications that result in more

culturally appropriate models of behavior analytic service delivery.

In summary, there may be many important reasons for behavior analysts to develop cultural awareness skills.

Although there is a growing interest in conceptual (e.g., Brodhead et al. 2014; Fong and Tanaka 2013) and applied strategies for administering behavioral interventions for clients from diverse cultural backgrounds (e.g., Padilla Dalamau et al. 2011; Rispoli et al. 2011; Washio and Houmanfar 2007), there is little guidance concerning how practicing behavior analysts can become culturally aware or further develop that awareness. Therefore, guidance on how to become culturally aware may be an important resource for behavior analysts.

The purpose of this paper is to offer suggestions that can serve as a starting point for how behavior analysts may further increase their cultural awareness. We believe that cultural awareness, as described herein, reflect Baer et al. (1968) statement that the “behavior, stimuli and/or organism under study are chosen because of their importance to man and society” (p. 92). Individuals participating in behavior change programs and those who provide significant support for them should determine what is important to them, to their society, and to their culture. In this paper, we discuss strategies for understanding a client’s cultural values and contingencies, as well as those of the behavior analyst. Then, we describe strategies for embedding cultural awareness practices into behavior analytic service delivery, supervision, and professional development. Finally, we conclude with additional discussion and considerations for becoming culturally aware in everyday practice.

Strategies for Developing Cultural Awareness

The following two sections describe how behavior analysts can become more aware of personal cultural values and contingencies and how they can develop skills to learn about their clients’ cultural identities. We will refer to cultural values and contingencies as the cultural system, except where values or contingencies play an independent role in our analysis of developing cultural awareness. We will refer to cultural identity as characteristics that extend beyond individual differences to those traits that members of a given culture share with one another (Adler 1998). For example, an individual from Africa may express their cultural identity through their belief structure, attire, foods eaten, or hair style. Even though this individual might identify as African, there are subcultures to which they might further identify with. Our suggestions are meant to serve as a starting point for furthering a behavior analytic understanding of cultural awareness and how that awareness can be integrated and improved upon in everyday practice. It is recommended that behavior analysts

concurrently engage in cultural awareness practices concerning their own behavior as well as those of their clients. It is important to be aware of one’s own biases or preconceived notions as a behavior analyst, as well acknowledging limitations in one’s cultural knowledge. Lastly, our suggestions are not intended to result in a rigid set of rules or practices. Rather, our hope is the suggestions will lead to broad practices that develop and continually refine cultural awareness, which will hopefully allow behavior analysts to be more open and flexible to the various cultures that will be experienced. Openness and flexibility in the presence of various cultures will hopefully result in better outcomes for those we serve.

Developing Cultural Awareness of Self

From a behavior analytic perspective, self-awareness can be defined as verbal discrimination of our own behavior (Barnes-Holmes et al. 2001). Sugai et al. (2012) describe culture as common behaviors related by comparable learning histories, social and environmental contingencies, contexts and stimuli, so self-awareness might also include verbal discrimination of these aspects of personal experience. An understanding of our own cultural system may be an important first step toward correcting biases that affect our interactions with others (Lillis and Hayes 2007). The American Psychological Association’s (APA) (2003) multicultural guidelines encourage clinicians to “recognize that, as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of and interactions with individuals who are ethnically and racially different from themselves” (p. 382). Developing self-awareness may prevent our biases from impeding how we serve culturally diverse clients.

One strategy to enhance cultural self-awareness is talking about our diverse client interactions with a professional community in group discussions, written forums, journals, mentorship meetings, verbal feedback sessions, or self-reflective exercises (Tervalon and Murray-Garcia 1998). Skinner (1974) emphasized the relationship between self-awareness and control over our own behavior, and proposed that talking about our behavior is how we achieve self-awareness. Recent behavior analytic research indicates that when individuals verbally describe their own behavior, the behavior may change (Tourinho 2006). Discussion with mentors and colleagues may help behavior analysts learn about themselves and also change their cross-cultural interactions for the better.

Another suggestion is to be “mindful” by attending fully and alertly, in the moment, to client interactions and our own private events, without judging or evaluating the events as they occur (Bishop et al. 2004; Hayes and Plumb 2007; Vandenberghe 2008). We recommend practitioners hone their ability to attend closely to clients and self, in context, for two reasons related to self-awareness. First, such attention may

help enhance skills of self-observation and self-description regarding our overt and covert behavior. Also, while we can remain committed to overtly behaving in ways consistent with values of multiculturalism, even in the presence of values and contingencies that create bias, mindfulness may reduce the biases that produce thoughts, feelings, and reactions to culturally diverse people (Lillis and Hayes 2007). Attending closely to our clients and being active and alert is good practice for building rapport, too.

Clinicians can engage in more culturally aware practice by assessing, collecting data, and testing hypotheses rather than accepting their own experiences and biases as the norm (Sue 1998). Scientific mindedness is a characteristic of clinicians and human service providers who develop theories about client behaviors by analyzing data rather than by dependence on their personal assumptions (Sue 1998), and may reduce bias and foster better understanding of client behavior. A reliance on scientific, behavior analytic knowledge when working with clients is also required by the Professional and Ethical Compliance Code for Behavior Analysts (BACB 2015).

While mindful attention focuses on the interaction between the behavior analyst and the client/family, scientific mindedness is a focus on interpreting information from the client and family; both characteristics facilitate culturally aware practice. For example, a behavior analyst consults to a family of a child with a sleep disorder, and learns that the mother sleeps in her five-year-old child's bed while the father sleeps in a larger room, alone. The practitioner may notice, and be able to covertly tact, that this is not the norm of the cultural majority nor congruent with his personal experience or values. The analyst may assume that the mother should not sleep in the child's bed or notice thoughts of judgment he feels. Lillis and Hayes (2007) recommend practitioners accept that such reactions may be normal, given our cultural systems and the human tendency to evaluate, but remain committed to acting positively based on our values. Through a process of assessment and covert verbal behavior, the practitioner might accept the co-sleeping arrangement to be culturally appropriate for and preferred by the family, and choose to develop an intervention that keeps the arrangement in place. A blend of both self-awareness and reliance on scientific knowledge is likely to produce the most culturally aware assessment and intervention.

Finally, there are several self-assessment tools that behavior analysts can use to become more aware of their own cultural identity. We recommend the use of assessment tools for measuring and reflecting on the clinician's own cultural biases, values, and understanding. One assessment tool, the "Diversity Self-Assessment," that can be utilized during the intake process allows team members to examine their understanding of diversity (Montgomery 2001); this tool asks users to reflect on their own assumptions and biases by answering 11 questions. Another assessment tool that may be useful is

the self-test questionnaire entitled "How Do You Relate to Various Groups of People in Society?" (Randall-David 1989). This questionnaire asks respondents how they might respond to individuals of various cultural backgrounds—by greeting, by accepting, by obtaining help from, by having background knowledge about, and/or by advocating for the individuals. The 30 types of individuals in these questions are then organized into five categories: ethnic/racial, social issues/problems, religious, physically/mentally handicapped, and political, and a concentration of checks within a specific category of individuals or at specific levels of response may then indicate a conflict that could prevent the respondent from providing effective treatment. Behavior analysts can then consider how their biases might affect treatment and may consider other courses of action, such as making referrals to other behavior analysts. A final potentially useful measure is the Multicultural Sensitivity Scale (Jibaja et al. 2000), a 21-item self-assessment tool developed as a valid and reliable way to measure multicultural sensitivity. This tool was originally used to assess the multicultural sensitivity of teachers and was later adapted to be used by physician assistant students (Jibaja-Rusth et al. 1994). Altogether, the behavior analyst may find these assessments helpful in further developing their own cultural awareness in order to further develop culturally competent methods of service delivery.

Developing Cultural Awareness of Clients

The above section describes strategies for how a behavior analyst may learn about his or her own cultural system. Below, we describe how behavior analysts may learn more about their client's cultural system through assessment practices. Culturally aware assessment practices may allow behavior analysts to obtain important cultural information about clients in order to understand their worldviews. Culturally aware assessment may also allow behavior analysts to identify any potential cultural barriers such as modalities of communication and expression of emotions (see Garcia et al. 2003).

To increase the probability that assessment will identify cultural variables, Vandenberghe (2008) recommends focusing on functional relations and behavioral principles rather than topography. For example, Filipino families often live with extended family members, and the household situation can seem chaotic by Western living standards. If a child has difficulty sleeping, a behavior analyst may advise the parents that they should separate the sleeping room from the living room. People of Filipino descent may be shy about responding to someone in a position of authority, so they may say "yes" to the behavior analyst. However, during the following session, it might be revealed that the parents did not change anything and that the child is still sleep deprived. In this case, a natural reaction may be to become frustrated with the lack of parental follow through. However, lack of follow through may also be

interpreted as an indicator that the intervention recommendation may not have been culturally appropriate.

Vandenberghe's (2008) description of functional analytic psychotherapy may also be a useful resource for determining how to provide culturally aware behavior analytic practices. Vandenberghe (2008) emphasizes the need for a behavior analyst to be aware of differences that may exist, including cultural differences, between the behavior analyst, client, and their families. Specifically, behavior analysts should be knowledgeable about the client's culture, differentiate between an unfamiliar cultural norm and a pathology, and take culture into consideration during the therapeutic process. Finally, Hymes (1962) noted that communicative competence is related to an individual's awareness of the laws of language structure and language use within a given culture. Therefore, behavior analysts should be skilled in sending and receiving cultural communications. Specific recommendations are described below.

Recommendations

Consider the Language of Assessment Our first recommendation, which applies to all phases of assessment and treatment, is that behavior analysts should reflect on the spoken and written language he or she uses and how it will be perceived by the client. We recommend behavior analysts avoid the use of behavior analytic jargon, as it may confuse clients and their families, and possibly lead to their failure to implement interventions. This recommendation is consistent with the Professional and Ethical Compliance Code for Behavior Analysts (2015). For example when the phrase "functional analysis" is used, Japanese families assume that it is mathematical jargon rather than a reference to a behavior analytic assessment process. Avoidance of excessive or complex behavior analytic jargon may eliminate such problems.

It is important throughout assessment and treatment to communicate in a manner easily understood, culturally aware, and does not include terms that are culturally inappropriate or confusing (Rolider and Axelrod 2005). Furthermore, it may be important to consider who will be completing service related forms (e.g., intake paperwork) and whether the level of literacy and comprehension of the language used in the forms are similar. If a person lacks adequate language comprehension, completing paperwork may be difficult, embarrassing, or intimidating. In such a case, behavior analysts may consider giving the person the opportunity to complete the forms orally or have another person help with the form completion. They may also consider using an interpreter or providing forms in the person's native language. Additionally, we agree with Vandenberghe's (2008) recommendation that the language used to define problem behaviors should be carefully examined to ensure the behaviors are communicated in a positive manner using multiple forms of communication that are sensitive to potential cultural differences in eye contact, wait time,

meanings of words, non-vocal body language, personal space, and quality of voice.

Understand Cultural Identity Our second recommendation is to consider that the client, and the client's family and community, are important sources for acquiring an understanding the cultural identity of the individual. Therefore, we recommend conducting an analysis of cultural identity with stakeholders immediately after service initiation with the client and/or family. The cultural identity analysis should inform the assessment process and the designing of interventions. During intake, the behavior analyst may, with proper consent, gather input from key community members familiar with the client, in addition to those whose feedback is typically sought (e.g., teachers, professionals, administrators, and family). Additionally, the behavior analyst should seek recommendations from the family regarding additional parties (e.g., other community members) who should be involved. Family and community members may be able to provide the most valuable information regarding the client's culture, language, and sociocultural framework (Salend and Taylor 2002). These discussions will allow members of the team to acquire a mutual understanding of the client's cultural system, which may result in increased cultural awareness.

It is important to highlight that the client/family's language is an important cultural variable that should be understood in addition to collaboration with stakeholders. For example, behavioral patterns may be similar across cultures, while the language and concepts that are used can differ (Vandenberghe 2008). In Japan, parents and teachers may use the word "panic" to describe a child's behavior, and this may imply a "tantrum" or "meltdown." Because the word "tantrum" is often associated with baby colic behavior, parents and teachers may prefer to use "panic" to describe the aggressive behavior of older children. Without knowing this, a behavior analyst may initially misunderstand what the client's challenging behavior is. It is therefore important for behavior analysts to clarify what the client or family actually mean by the terms they use.

The behavior analyst should also consider accounting for what treatments are appropriate, preferable, or considered norms within a culture. As illustrated by the example of the Filipino family at the beginning of this section, identifying cultural norms may be important for successful assessment and effective treatment. Information about what is acceptable within a person's culture is also ideally obtained beginning with the intake process (and later during the assessment process) by including stakeholders in the process and ensuring that background information includes input from multiple sources of information (assessments and interviews; Sugai et al. 2012). For example, the grandparents rather than the parents may be the primary caregivers in an Indian family. Therefore, it would be important to include the grandparents

during intake in order to obtain information. During later phases of the intervention, it may also be beneficial to continue to involve the family in development of the data collection and to make changes in the intervention based on the family's interactional style. In designing the intervention, the team will then be able to include culturally appropriate reinforcers and skill building, again taking into account strategies that are appropriate to the client's culture and belief system.

It may also be important to define a client's behavior in positive terms and in relation to cultural norms to help ensure culturally aware behavioral definitions. For example, in examining table manners across cultures, French parents may believe that child table manners are the essence of their culture. In Japan, in contrast, many children will leave the table during a meal, and it is acceptable in certain settings for them to run around, even in restaurants. More specifically, during lunch with family friends, a Japanese child might imitate a peer and leave the table during lunch with a smile on his or her face. For Japanese parents, this is the cultural norm, but French parents often consider this behavior is inappropriate.

Use Readily Available Resources Our third and final recommendation for this section is for behavior analysts to consider making use of the resources that are already available to help make their practice more culturally aware. Salend and Taylor (2002) describe guidelines for creating more culturally aware functional behavior assessments. These guidelines suggest behavior analysts should involve family, community members, and professionals to learn about the client's culture and examine possible sociocultural explanations of behavior. They also suggest behavior analysts attend trainings and engage in activities that allow them to reflect on how their culture might impact their belief system (Salend and Taylor 2002).

Another resource that can help behavior analysts enhance their culturally awareness is provided by Sugai et al. (2012). The authors discuss how applied behavior analytical terms can be understood within different cultural contexts. For example, in some cultures, the concept of reinforcement can be illustrated by describing the act of bowing to greet one another. In this exchange, a bow is more likely to be given if a person is first bowed to, thus the initial bowing behavior is reinforced. Like Salend and Taylor (2002), these authors describe how steps in interventions, such as school-wide positive behavior support, can be made more culturally aware—for example, by using activities that are considerate of learning histories and the norms and values of the culture, family, school, and community.

Tanaka-Matsumi et al. (1996) also provided another resource for increasing culturally aware behavior analytic services. Specifically, the authors provide guidelines for conducting a culturally informed functional assessment interview, in which increases in accurate case formulation,

decreases in diagnostic errors, decreases in attrition, increases in the credibility of the therapy, and increases in the expectation of positive change, client compliance, and active participation in treatment might be a result. The authors emphasize the importance of examining the functional relationships between a client's behavior and culture, which may increase buy-in from all parties involved and help acquire an accurate description of the client's challenging behavior.

Moving from Assessment to Treatment Once information has been obtained through reflection on and assessment of the client's culture as well as the behavior analyst's own culture, the behavior analyst can use the information to make informed decisions about next courses of action, such as accepting the client, referring the client elsewhere, seeking additional information about the client's culture, or securing supervision from a more experienced behavior analyst as needed. It should be noted that lack of a cultural match does not necessarily mean that the behavior analyst cannot provide adequate services to the client. A behavior analyst should rely on professional experience and knowledge to serve this client, given the behavior analyst's cultural context, but should also remember that within-group differences are greater than between-group differences (Sue 2003). For example, a client of the same race and socioeconomic background may not have cultural norms that are strongly similar to those of the behavior analyst. There are various domains of culture (e.g., family, geography, sexual orientation, and religion) that relate to the behavior of the individual. A behavior analyst who lacks experience and knowledge to serve a culturally different client should seek additional information about the client's cultural behaviors, values, and norms and should also seek direct exposure to culturally similar experiences and people, if possible (Sugai et al. 2012; Vandenberghe 2008). Finally, even when behavior analysts strive to be more culturally aware, provision of culturally aware services may not always go smoothly (Vandenberghe 2008), so behavior analysts should view skill development in this domain as a process and engage in ongoing assessment to continually improve their practice (see the “Cultural Awareness Training in Graduate and Professional Development Programs” section below).

Recommendations for Increasing Cultural Awareness within Clinical Organizations and Professional Development Programs

In order for behavior analysts to become aware of the cultural values of their clients, as well as their own cultural values, service delivery and training programs must also develop systems of support and encourage professional growth in this area. The following recommendations concern how cultural awareness training can be integrated into clinical

organizations and graduate and professional development programs. These recommendations are not all inclusive; rather, they highlight examples of how behavior analysts can institutionalize cultural awareness within their professional and training systems.

Increasing Cultural Awareness within a Clinical Organization

One strategy to increase the likelihood of culturally aware behavior is to embed cultural awareness training and supervision at the institutional level within an organization. Implementing training and supervision systems may help an organization achieve the goal of institutionalizing the skill of cultural awareness (see Betancourt et al. 2003, for suggestions on cultural competency training for health care workers). The following three recommendations are based on Brodhead and Higbee's (2012) recommendations for using behavioral systems to teach and maintain ethical behavior in a human service organization.

The first recommendation is to identify an individual within the organization who can be charged with ensuring that cultural awareness is addressed. Because it is likely not to be reasonable or possible for all members of the organization to focus solely on developing cultural competency, it may be useful for an organization to identify one individual who can help guide the development of cultural awareness in other members of the organization. This individual's role would be similar to that of the ethics coordinator described by Brodhead and Higbee (2012). The identified individual who would focus on cultural competency would also be responsible for identifying points of discussion for individual and group supervision and would also serve as a reference within the organization to stay up-to-date on best practices for cultural competency.

The second recommendation is to incorporate cultural awareness training into individual supervision. During individual supervision, the supervisor can ask the supervisee to discuss any instances where conflicts between cultures might result in barriers to effective service delivery. For example, a supervisee may seek feedback on the appropriate way to respond when offered food during in-home consultation. The supervisee may also seek guidance on how the cultural values and contingencies of a specific family should be considered when designing a parent training, as parental values might lead to parenting styles that are culture specific (Akcinar and Baydar 2014). The purpose of discussing cultural awareness during supervision meetings is to provide multiple, continuous opportunities for feedback and discussion. It is recommended that fidelity checklists be developed and used in supervision include items that assess cultural awareness during assessment, intervention, and ongoing consultation.

The third recommendation is to incorporate cultural awareness training into group supervision and training. Similar to company-wide trainings on ethics, functional assessment, and skill acquisition, trainings on cultural competency can allow for group discussion and feedback on best practices for the cultures the organization is likely to serve. Difficult or important questions that arise during individual supervision can be addressed during group training, allowing for additional opportunities for discussion and feedback about the appropriate service delivery under a given set of cultural variables. Discussions can be facilitated by a company expert in cultural competency to ensure that topics are adequately addressed (see Wolfe and Durán 2013, for a review and suggestions for a similar training in a public school setting).

One strategy for behavior analysts to document the efficacy of their services may be to distribute social validity surveys to the clients they serve. Social validity surveys can ask whether clients are pleased with their interactions with the behavior analyst, whether the behavior analyst is respectful of cultural values, and whether the behavior analyst recommends culturally appropriate interventions. Such a survey could also be useful for evaluating the effectiveness of supervision and professional development programs in creating culturally aware behavior analysts.

Cultural Awareness Training in Graduate and Professional Development Programs

Developing training programs for behavior analysts that teach cultural awareness could have a positive impact on the field of behavior analysis. This is especially important given the recent expansion of behavior analysis training programs as well as the application of behavior analysis outside of the United States. To address the need to develop cultural awareness skills, behavior analysts will need to develop coursework specific to cultural awareness, develop standards for practice and competency (Carey and Marques 2007; Diaz-Lazaro and Cohen 2001; Fong and Tanaka 2013; Westefeld and Rasmussen 2013), and develop continuing education opportunities to assure continued competency (Cross et al. 1989).

One strategy to ensure that the professional development of behavior analysts addresses cultural awareness is to include cultural awareness content in behavior analytic course sequences. The BACB Fourth Edition Task List does not explicitly cover cultural awareness or content related to cultural systems. However, other comparable fields such as psychology and medicine require specific training for cultural awareness (American Psychological Association [APA], 2015; Association of American Medical Colleges 2005). Specifically, medical students are required to have cultural competency training integrated into their curriculum in order to assure that cultural competency is established as an important and pervasive issue in the provision of care. Furthermore,

there exist specific accreditation standards in psychology relating to cultural competency in the practice of psychologists that concern the various means by which cultural competency can impact the conduct of the behavior analyst (APA 2015). In addition to ethical standards regarding the practice of behavior analysis, we recommend that the field adopt appropriate cultural training standards. While it may be the case that effective assessment and intervention will likely include an analysis of relevant cultural variables, the absence of training standards related to conducting and developing culturally aware practice skills in our discipline's task list (BACB 2015) may lead to a failure to foster and develop the necessary skills. Specifically, these training targets would be of the greatest importance in “Recommendations for Increasing Culture of Awareness within Clinical Organizations and Professional Development Programs” Section of the task list, which focuses on the development of skills related to the client-centered responsibilities of aspiring behavior analysts.

Another strategy to increase cultural awareness may be to institutionalize standards of practice for serving clients from diverse cultural backgrounds. Representing the Multicultural Alliance of Behavior Analysis, a special interest group of the Association for Behavior Analysis International, Fong and Tanaka (2013) published a list of seven standards for cultural competence in behavior analysis. These standards include understanding one's own cultural biases and how these might conflict with the biases of those they serve, using culturally aware applications of behavior analysis, and advocating for diversity in the workplace. Fong and Tanaka (2013) also suggest that behavior analysts advocate for culturally appropriate language interventions, participate in continuing education and training related to cultural awareness, and make appropriate referrals if they are not qualified to work with diverse clients. We encourage organizations and training programs to review Fong and Tanaka's (2013) recommendations and consider integrating them into supervision and coursework.

Researchers, creators of training materials, and administrators of university programs can all contribute to developing cultural awareness skills in the field. We encourage more research on topics of diversity, cross-cultural implementation, and international dissemination of ABA. It has been recommended that when behaviorally oriented researchers publish articles, the “Participant” section include more information about cultural variables (Brodhead et al. 2014; Kaufman et al. 2008). We further suggest that authors of textbooks and training manuals, and designers of continuing education and online trainings increase the number and variety of topics related to culture and diversity. By adding more examples of scenarios involving issues of diversity, cultural awareness, and culturally aware assessment and intervention, behavior analysts may continue to lay the groundwork for pre-service behavior analysts to practice more effectively with a broader range of populations. Administrators and faculty in

universities can set specific learning outcomes for teaching about diversity and cross-cultural implementation skills. Such initiatives can be adopted at the level of the university or within an academic department. Behavior analytic training programs can also develop student abroad experiences to introduce students to different cultures or program experiences involving different local cultures. Effectiveness with diverse populations can be specified as both a value and a learning outcome for students in our programs.

A final strategy for integrating cultural awareness into professional development is to encourage continuing education requirements for cultural awareness. In the field of behavior analysis, professional development with respect to cultural awareness receives no special attention. As a result, if behavior analysts in the field come into contact with issues related to culture in continuing education, they are likely to do so in the general category of ethics. Even if standards for cultural awareness are not established, we recommend that qualified behavior analysts consider conducting continuing education trainings on cultural awareness in order to increase the probability of behavior analysts coming into contact with important information related to cultural systems.

Discussion

Two decades ago, Hayes and Toarmino (1995) asked, “if behavioral principles are generally applicable, why is it necessary to understand cultural diversity?” Today, behavior analysts may remain unconvinced that specific training in cultural awareness is required. The BACB Fourth Edition Task List does not directly address cultural awareness in its own titled guideline, and most behavior analytic graduate and certificate programs are based in large part on the Task List (BACB 2012). We argue that few specific practice guidelines are available to behavior analysts. However, the Professional and Ethical Compliance Code for Behavior Analysts (BACB 2015) does touch on this topic, with the requirement that

Where differences of age, gender, race, culture, ethnicity, national origin, religion, sexual orientation, disability, language, or socioeconomic status significantly affect behavior analysts' work concerning particular individuals or groups, behavior analysts obtain the training, experience, consultation, and/or supervision necessary to ensure the competence of their services, or they make appropriate referrals. (p.5)

However, we suggest that such cultural differences always affect our work with individuals or groups. Therefore, it may be important for behavior analysts to continue to develop their cultural awareness skills by systematically ensuring ongoing

training, experience, and supervision for cultural competence and awareness.

The above recommendations are meant to serve as a starting point for considering strategies to increase cultural awareness among behavior analysts. Although the recommendations may very well improve a behavior analyst's cultural awareness, there are several additional considerations and limitations to our recommendations. First, it is important for behavior analysts to not make gross generalizations about clients or their families based on the culture(s) they represent. Specifically, if an individual lives in the United States of America, is light skinned, attends a Christian denomination church and speaks English fluently, one should not assume that the individual is of European American descent. In fact, that individual might be of Hispanic descent, speak Portuguese fluently, come from Guatemala, and reside in the United States temporarily while competing higher education requirements. It is very possible that avoiding such generalization or stereotyping can be difficult when learning or teaching about cultural practices as part of a cultural awareness system. However, collecting information about different cultural systems should place behavior analysts in a better position to "infer the possible effects of the environment" in order to make effective treatment recommendations (Brodhead et al. 2014, p. 81). Therefore, we encourage behavior analysts consider our recommendations for increasing culturally awareness prior to the intake process.

Another limitation of this paper is that it does not provide systematic guidelines for how behavior analysts should work with culturally diverse clients. However, because there is a lack of resources in the area of cultural awareness and behavior analysis, we hope this paper serves as a starting point for future discussions and analyses. Systematic guidelines for practicing behavior analysts have been published in other areas, such as guidelines for identifying an appropriate function-based treatment for escape-maintained problem behavior (Geiger et al. 2010) and for maintaining professional relationships (Brodhead 2015). Therefore, it may be useful for future researchers or behavior analysts to develop systematic guidelines for working with culturally diverse clients in order to provide practicing behavior analysts with a systematic framework for their work.

Finally, it is important to note that the fidelity of the behavior analytic intervention should not be compromised in order to incorporate culturally aware practices. It is very possible that a culturally informed assessment may lead to a culturally informed intervention that may ultimately lead to implementation with high fidelity. Whereas, an assessment that is not culturally informed may lead to an intervention not matched to client culture which then can't be implemented with fidelity. In some cases, however, multiple courses of treatment may be available to deliver the same treatment outcome. If this occurs, we recommend that behavior analysts consider identifying the most culturally appropriate treatment whenever possible. See

Padilla Dalamau et al. (2011) for an example of identifying client preferences for functional communication training interventions.

In summary, cultural variables matter even when implementing practices supported by research and based on the science of behavior analysis (Sugai et al. 2012). No behavior analyst can learn everything about every culture. However, we can develop skills to collect the right data and to understand ways in which culture may affect reinforcers, goals, teams, and interventions in general. We can cultivate awareness of diversity and willingness to honor what is right for our clients. Behavior analysts may not be even aware of how much our personal learning histories differ from the contingencies related to our clients' behaviors, their reinforcers, their behavioral patterns, and the effect of the societal systems in which they live. Continuing to cultivate openness to learning about these variables, along with an awareness of the limitations created by our personal learning histories, may lead us in new directions that will benefit diverse populations with behavior analysis. The growing diversity of our population expands the complexity and variety we can expect to encounter, and so we must continue to develop cultural competence skills through behaviors of awareness, collecting the right data, and honoring what is important to our clients.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no competing interests.

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

References

- Adler, P. S. (1998). Beyond cultural identity: reflections on multiculturalism. *Basic concepts of intercultural communication: Selected readings*, 225–245.
- Akcinar, B., & Baydar, N. (2014). Parental control is not unconditionally detrimental for externalizing behaviors in early childhood. *International Journal of Behavioral Disorders*, 38, 118–127. doi: 10.1177/0165025413513701.
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, 58(5), 377–402. doi:10.1037/0003-066X.58.5.377.
- American Psychological Association. (2015). Guidelines and principles for accreditation of programs in professional psychology: Quick reference guide to internship programs. Retrieved from <http://www.apa.org/ed/accreditation/about/policies/interns.aspx>.
- Association of American Medical Colleges. (2005). Cultural Competence Education. Retrieved from <http://www.aamc.org/download/54338/data/culturalcomped.pdf>
- Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis.

- Journal of Applied Behavior Analysis*, 1(1), 91–97. doi: 10.1901/jaba.1968.1-91.
- Barnes-Holmes, Y., Barnes-Holmes, D., Roche, B., & Smeets, P. M. (2001). The development of self and perspective-taking. *Behavioral Development Bulletin*, 1, 42–45.
- Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1(1), 91–97.
- Behavior Analyst Certification Board. (2012). Fourth edition task list, retrieved from http://bacb.com/wp-content/uploads/2015/05/BACB_Fourth_Edition_Task_List.pdf.
- Behavior Analyst Certification Board. (2015). Guidelines for responsible conduct for behavior analysts. Retrieved from <http://bacb.com/wp-content/uploads/2015/08/150824-compliance-code-english.pdf>.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O., II. (2003). Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, 118, 293–302.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abby, S., Specia, M., Velting, D., & Devins, G. (2004). Mindfulness: a proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. doi:10.1093/clipsy/bph077.
- Bolling, M. Y. (2002). Research and representation: a conundrum for behavior analysts. *Behavior and Social Issues*, 12, 19–28.
- Brodhead, M. T. (2015). Maintaining professional relationships in an interdisciplinary setting: strategies for navigating nonbehavioral treatment recommendations for individuals with autism. *Behavior Analysis in Practice*, 8, 70–78. doi:10.1007/s40617-015-0042-7.
- Brodhead, M. T., & Higbee, T. S. (2012). Teaching and maintaining ethical behavior in a professional organization. *Behavior Analysis in Practice*, 5, 82–88.
- Brodhead, M. T., Durán, L., & Bloom, S. E. (2014). Cultural and linguistic diversity in recent verbal behavior research on individuals with disabilities: a review and implications for research and practice. *The Analysis of Verbal Behavior*, 30, 75–86. doi:10.1007/s40616-014-0009-8.
- Carey, D., & Marques, P. (2007). From expert to collaborator. *The Clinical Supervisor*, 26, 141–157. doi:10.1300/J001v26n01_10.
- Cross, T. L., Bazron, B. J., Dennis, K. W., & Isaacs, M. R. (1989). Toward a culturally competent system of care: a monograph on effective services for minority children who are severely emotionally disturbed. Retrieved from <http://files.eric.ed.gov/fulltext/ED330171.pdf>.
- Diaz-Lazaro, C. M., & Cohen, B. B. (2001). Cross-cultural contact in counseling training. *Journal of Multicultural Counseling and Development*, 29, 41–56. doi:10.1002/j.2161-1912.2001.tb00502.x.
- Fong, E. H., & Tanaka, S. (2013). Multicultural alliance of behavior analysis standards for cultural competence in behavior analysis. *International Journal of Behavioral Consultation and Therapy*, 8, 17–19.
- Garcia, J. G., Cartwright, B., Winston, S. M., & Borzuchowska, B. (2003). A transcultural integrative model for ethical decision making in counseling. *Journal of Counseling & Development*, 81(3), 268–277. doi:10.1002/j.1556-6678.2003.tb00253.x.
- Geiger, K. B., Carr, J. E., & LeBlanc, L. A. (2010). Function-based treatments for escape-maintained problem behavior: a treatment-selection model for practicing behavior analysts. *Behavior Analysis in Practice*, 3, 22–32.
- Glenn, S. S. (1993). Windows on the 21st century. *The Behavior Analyst*, 16, 133–151.
- Goldiamond, I. (2002). Toward a constructional approach to social problems: ethical and constitutional issues raised by applied behavior analysis. *Behavior and Social Issues*, 11(2), 108–197.
- Hayes, S. C., & Plumb, J. C. (2007). Mindfulness from the bottom up: providing an inductive framework for understanding mindfulness processes and their application to human suffering. *Psychological Inquiry*, 18(4), 242–248. doi:10.1080/10478400701598314.
- Hayes, S. C., & Toarmino, D. (1995). If behavioral principles are generally applicable, why is it necessary to understand cultural diversity? *The Behavior Therapist*, 18, 21–23.
- Hymes, D. (1962) The ethnography of speaking. In T. Glawinand W.C. Sturtevant (eds.). *Anthropology and human behavior*, 13–53. Washington, DC: Anthropological Society of Washington. Reprinted in J. A. Fishman, 1968. *Readings in the Sociology of Language*, 99–138. The Hague: Mouton.
- Jibaja, M. L., Sebastian, R., Kingery, P., & Holcomb, J. D. (2000). The multicultural sensitivity of physician assistant students. *Journal of Allied Health*, 29, 79–85.
- Jibaja-Rusth, M. L., Kingery, P. M., Holcomb, J. D., Bruckner, W. P., & Pruitt, B. E. (1994). Development of a multicultural sensitivity scale. *Journal of Health Education*, 25(6), 350–357. doi:10.1080/10556699.1994.10603060.
- Jones, E. W., & Hoerger, M. L. (2009). Brief report: establishing ABA programs in a welsh context: cross-cultural considerations. *European Journal of Behavior Analysis*, 10, 249–253.
- Kauffman, J. M., Conroy, M., Gardner, R., & Oswald, D. (2008). Cultural sensitivity in the application of behavioral principles in education. *Education and Treatment in Children*, 31, 239–262.
- Lillis, J., & Hayes, S. C. (2007). Applying acceptance, mindfulness, and values to the reduction of prejudice: a pilot study. *Behavior Modification*, 31(4), 389–411. doi:10.1177/0145445506298413.
- Montgomery, W. (2001). Creating culturally responsive, inclusive classrooms. *Teaching Exceptional Children*, 33(4), 4–9.
- Padilla Dalama, Y. C., Wacker, D. P., Harding, J. W., Berg, W. K., & Schietz, K. M. (2011). A preliminary evaluation of functional communication training effectiveness and language preference when Spanish and English are manipulated. *Journal of Behavioral Education*, 20, 233–251. doi:10.1007/s10864-011-9131-z.
- Randall-David, E. (1989). *Strategies for working with culturally diverse communities and clients*. Washington, DC: Association for the Care of Children's Health.
- Rispoli, M., O'Reilly, M., Lang, R., Sigafoos, J., Mulloy, A., Auguilar, J., & Singer, G. (2011). Effects of language implementation on functional analysis outcomes. *Journal of Behavioral Education*, 20, 224–232. doi:10.1007/s10864-011-9128-7.
- Rolider, A., & Axelrod, S. (2005). The effects of “behavior-speak” on public attitudes toward behavioral interventions: A crosscultural argument for using conversational language to describe behavioral interventions to the general public. In W. L. Heward, T. E. Heron, N. A. Neef, S. M. Peterson, D. M. Sainato, G. Cartledge, et al. (Eds.), *Focus on behavior analysis in education: Achievements, challenges, and opportunities* (pp. 283–294). Upper Saddle River: Pearson Press.
- Salend, S. J., & Taylor, L. S. (2002). Cultural perspectives: missing pieces in the functional assessment process. *Intervention in School and Clinic*, 38(2), 104–112. doi:10.1177/10534512020380020601.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Collier-Macmillan.
- Skinner, B. F. (1974). *About behaviorism*. New York: Knopf.
- Skinner, B. F. (1981). Selection by consequences. *Science*, 213, 501–504.
- Spring, B. (2007). Evidence-based practice in clinical psychology: what it is, why it matters; what you need to know. *Journal of Clinical Psychology*, 63(7), 611–631. doi:10.1002/jclp.20373.
- Sue, S. (1998). In search of cultural competence in psychotherapy and counseling. *American Psychologist*, 53(4), 440–448. doi:10.1037/0003-066X.53.4.440.
- Sue, D. W. (2003). Cultural competence in the treatment of ethnic minority populations. In D. W. Sue (Ed.), *Psychological treatment of ethnic minority populations* (pp. 4–7). Washington, DC: APA Press.
- Sugai, G., O'Keefe, B. V., & Fallon, L. M. (2012). A contextual consideration of culture and schoolwide positive behavior support. *Journal*

- of Positive Behavior Interventions*, 14(4). 197–208. doi:10.1177/1098300711426334.
- Tanaka-Matsumi, J., Seiden, D. Y., & Lam, K. N. (1996). The Culturally Informed Functional Assessment (CIFA) interview: a strategy for cross-cultural behavioral practice. *Cognitive and Behavioral Practice*, 3(2), 215–233. doi:10.1016/S1077-7229(96)80015-0.
- Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved*, 9(2), 117–125. doi:10.1353/hpu.2010.0233.
- Tourinho, E. Z. (2006). Private stimuli, covert responses, and private events: conceptual remarks. *The Behavior Analyst*, 29(1), 13–31.
- U.S. Department of Health and Human Services. (2001). Mental health: culture, race and ethnicity. A supplement to mental health: a report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, U.S. Public Health Services, Office of the Surgeon General.
- Vandenberghe, L. (2008). Culture-sensitive functional analytic psychotherapy. *The Behavior Analyst*, 31(1), 67.
- Washio, Y., & Housmanfar, R. (2007). Role of contextual control in second language performance. *The Analysis of Verbal Behavior*, 23, 41–56.
- Westefeld, J. S., & Rasmussen, W. (2013). Supervision: the importance and interaction of competency benchmarks and multiculturalism. *The Counseling Psychologist*, 41, 110–123. doi:10.1177/0011000012453945.
- Wolfe, K., & Durán, L. K. (2013). Culturally and linguistically diverse parents' perceptions of the IEP process: a review of current research. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 13, 4–18.