Future Directions of Training and Fieldwork in Diversity Issues in Applied Behavior Analysis

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Abstract

This paper examines the perceptions of behavior-analytic professionals holding credentials through the Behavior Analyst Certification Board® (BACB®)—including Board Certified Behavior Analysts–Doctoral™, Board Certified Behavior Analysts®, and Board Certified Assistant Behavior Analysts®—regarding multiculturalism and diversity issues in their graduate training, fieldwork, and supervision. This paper predominantly focuses on future directions for improving graduate training, fieldwork, and supervision requirements in the field of applied behavior analysis (ABA) to produce more culturally competent professionals. Results from a preliminary survey of BACB® certificants ($N = 575$) are included to provide a context for recommendations on how to move the field of ABA forward to enhance the training and preparation of future credentialed professionals.

Keywords Multiculturalism · Diversity · Applied behavior analysis · Graduate training · Fieldwork · Supervision

As the population in the United States increases, so do the number of individuals who are from diverse backgrounds. As of July 2016, the U.S. population was 323,127,513 people, and of that population, 76.9% are White, 13.3% are Black, 17.8% are Hispanic/Latino, 5.7% are Asian, 1.3% are American Indian/Alaskan Native, and 0.2% are Hawaiian/Pacific Islander (U.S. Census Bureau, 2016). This national trend also leads to an increase in the diverse populations that behavior analysts will provide services to in practice. An examination of the practice areas of behavior analysts shows that the majority of the work is with individuals with autism (67.65%) and developmental disabilities (8.33%), as well as in education sectors for students with disabilities (12.24%; Behavior Analyst Certification Board®, 2018a). Although these are not the only populations or areas in which behavior analysts can work, these areas do constitute a large portion of the population that is being served by behavior analysts. Research shows an increase in the number of culturally diverse students receiving special education services, and

approximately 30% of the national population of individuals with autism and developmental disabilities are members of minority groups (Autism Speaks Autism Treatment Network, 2014; de Valenzuela, Copeland, & Qi, 2006). Therefore, if behavior analysts are working predominantly with this population, then there is a value in these professionals being aware of how diversity can influence clinical practice.

According to the Behavior Analyst Certification Board® (BACB®, 2018a), as of September 12, 2018, there are currently 29,104 Board Certified Behavior Analysts® (BCBAs®) and 3,072 Board Certified Assistant Behavior Analysts® (BCaBAs®). An analysis of trends in the number of BACB® certificants over the years shows that from 1999 to 2009, there has been a constant growth in certificants with a slight decrease in growth seen in 2005 due to more strict certification standards (Deochand & Fuqua, 2016). However, since 2010 there has been a noticeable increase in the annual trends of BACB® certificants (Deochand & Fuqua, 2016). The most recent Burning Glass report commissioned by the BACB® shows that the annual demand for professionals holding BACB® credentials nationally has increased 800% from 2010 to 2017 (Behavior Analyst Certification Board®, 2018b).

Currently, there are no publicly available demographic data pertaining to certified professionals in applied behavior

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analysis (ABA) through the BACB® or any of the national (i.e., Association of Professional Behavior Analysts; APBA) and international (i.e., Association for Behavior Analysis International; ABAI) professional associations in the field. Therefore, there is no accessible information on the percentage of behavior-analytic professionals identifying as minorities or belonging to other diverse groups. Encouraging the growth of minority students studying ABA may then create a greater pool of prepared professionals who are culturally competent in behavior-analytic services and who would best serve the growing diversity of clients with various disabilities and disorders (Autism Speaks Autism Treatment Network, 2014; de Valenzuela et al., 2006). Although having a more diverse population of behavior analysts working in the field does not necessarily equate to more culturally competent professionals, it may help us recognize the needs of a more diverse client population. Given the increase in the number of behavior-analytic professionals in the field who will be working with diverse populations of clients, the need for training in multiculturalism and diversity issues becomes increasingly important.

Defining Culture and Cultural Competence

In terms of service delivery, cultural competency is becoming less of an option and more of a necessity (Fong, Ficklin, & Lee, 2017). Skinner (1953) explained *culture* as a collection of the contingencies of reinforcement into which individuals are born and to which they are exposed throughout their lives. Therefore, varying cultures offer one-of-a-kind environments that shape and influence individuals' behaviors. From a behavior-analytic framework, Sugai, O'Keeffe, and Fallon (2012) define culture as

the extent to which a group of individuals engage in an 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. (p. 200)

Cultural competence is defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or profession to work effectively in cross-cultural situations (National Center for Cultural Competence, 2018). It is suggested that cultural competency is achieved when a person is capable of integrating and transforming knowledge about diverse individuals and groups into specific standards, practices, policies, and attitudes that are applied in appropriate cultural settings to enhance the quality of services provided, thus producing better outcomes (Betancourt, Green, & Carillo, 2002; Davis, 1997). With this information in mind, developing cultural competence would be important for future

behavior analysts; unfortunately, culture has often been ignored, both in research and training standards, in the field of ABA.

Recent research has shown that diversity is lacking in the behavior-analytic research literature. Brodhead, Durán, and Bloom (2014) reviewed *The Analysis of Verbal Behavior* and the *Journal of Applied Behavior Analysis* to determine if researchers included cultural and linguistic diversity in published studies and found that most articles rarely reported the culture and language background of participants. Additionally, a review of five journals associated with the field of ABA (*Behavior Analysis in Practice*, *Behavioral Interventions*, the *Journal of Applied Behavior Analysis*, *Behavior Analysis: Research and Practice*, and *The Analysis of Verbal Behavior*) were examined to determine whether the demographic information about participants (e.g., sex, race and ethnicity, socioeconomic status, disability status) in clinical intervention articles was provided (Li, Wallace, Ehrhardt, & Poling, 2017). This research showed that the majority of articles reported sex and disability status but consistently lacked demographic information on race, ethnicity, and socioeconomic status (Li et al., 2017).

Training Standards on Multiculturalism and Diversity in ABA

Standards for training in multiculturalism and diversity issues are lacking in the scope of practice of behavior analysts. The Multicultural Alliance for Behavior Analysis developed a proposed set of standards for cultural competence in ABA. These standards relate to ethics and values, self-awareness, cross-cultural application, a diverse workforce, language diversity, professional education, and referrals (Fong & Tanaka, 2013, p. 19). This was a first step in providing a framework for professionals in the field of ABA because of a potential lack of cultural competency and diversity training. Additional discussion in this area has occurred, with researchers suggesting ways to develop the cultural awareness skills of behavior analysts (Fong, Catagnus, Brodhead, Quigley, & Field, 2016). Some suggestions included improving self-awareness with regard to cultural diversity and bias, becoming culturally aware when working clients, understanding cultural identity, considering language in the assessment process, and developing the skill set of being aware of how culture plays into behavior-analytic treatment (Fong et al., 2016). The need for the inclusion of cultural awareness training and coursework in graduate programs and professional development for behavior analysts has also been stressed by various authors (e.g., Carey & Marques, 2007; Cross, Bazron, Dennis, & Isaacs, 1989; Diaz-Lazaro & Cohen, 2001; Fong et al., 2016; Westefeld & Rasmussen, 2013).

A review of the current scope of practice of behavior analysts through the BACB® Task List (5th ed.) shows that the BACB® does not currently require any training in multiculturalism and diversity issues as part of these standards (Behavior Analyst Certification Board®, 2017). The only mention of multiculturalism and diversity is found in the BACB's® *Professional and Ethical Compliance Code for Behavior Analysts* under Code 1.03, Maintaining Competence through Professional Development, which discusses the importance of maintaining competency in skills and developing knowledge in new professional areas (Behavior Analyst Certification Board®, 2017). Behavior analysts can seek out professional development opportunities, but there is no BACB® requirement currently for behavior analysts to receive training or course credit in multiculturalism and diversity issues similar to the mandated continuing education in ethics or supervision.

Additionally, the BACB's® *Professional and Ethical Compliance Code for Behavior Analysts* mentions diversity in Code 1.05, Professional and Scientific Relationships, which states,

(c) 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. (d) In their work-related activities, behavior analysts do not engage in discrimination against individuals or groups based on age, gender, race, culture, ethnicity, national origin, religion, sexual orientation, disability, language, socioeconomic status, or any basis proscribed by law. (e) Behavior analysts do not knowingly engage in behavior that is harassing or demeaning to persons with whom they interact in their work based on factors such as those persons' age, gender, race, culture, ethnicity, national origin, religion, sexual orientation, disability, language, or socioeconomic status, in accordance with law. (f) Behavior analysts recognize that their personal problems and conflicts may interfere with their effectiveness. Behavior analysts refrain from providing services when their personal circumstances may compromise delivering services to the best of their abilities. (Behavior Analyst Certification Board®, 2016, p. 5)

Unfortunately, these standards do not address the actual training that is needed for behavior analysts to become culturally competent professionals in the field.

Furthermore, ABAI (2018) offers a diversity policy, which states,

The Association for Behavior Analysis International encourages diversity and inclusiveness in the field of behavior analysis broadly, and within the organization specifically. Diversity refers to differences in race, ethnicity, sexual orientation, gender identity, age, country of origin, religious or spiritual beliefs, ability, and social and economic class. (p. 1)

Although these statements discuss diversity and inclusivity in the profession, these statements and policies do not necessarily lead to behavior change in practice. Furthermore, neither the BACB® nor ABAI makes any mention of requiring diversity training for behavior analysts as practitioners. This is concerning because behavior analysts are similar to other human service professionals, such as psychologists, counselors, and educators, in that all of these professionals work with clients from diverse backgrounds and are responsible for their treatment. However, whereas all of the other human service professionals mentioned must receive training on how to work with individuals and families of diverse backgrounds, behavior analysts do not have the same requirement. With the recent announcement of ABAI now involved in monitoring verified course sequences (VCSs) for graduate programs, much is still yet to be seen if ABAI will begin making any suggestions for changes in training standards in collaboration with the BACB® (Association for Behavior Analysis International, 2017). Therefore, it is important to examine the need for BCBAs'® graduate training, fieldwork, and supervision experiences around multiculturalism and diversity in practice.

Purpose of the Study

Given the need for developing a better understanding of multiculturalism and diversity in behavior analysis, we developed a survey that examined the perceptions of BACB® certificants regarding their experiences with multiculturalism and diversity issues in their graduate training and fieldwork. We hypothesized that most BACB® certificants would have limited training in multiculturalism and diversity issues in their graduate-training programs. Additionally, we hypothesized that most BACB® certificants would also have limited experiences in these areas as part of their fieldwork. The survey was designed to begin a preliminary investigation of these issues, and the results are used to frame a discussion of the field's future directions in the areas of graduate training, fieldwork, and supervision.

Method

A survey was developed to examine the perceptions of BACB® credentialed professionals in their graduate training

and fieldwork experiences as it relates to multiculturalism and diversity issues. The subsequent sections outline more information about the survey instrument and the procedures of recruitment of survey participants.

Materials

The survey included 17 total questions consisting of 8 questions gathering demographic information, 4 Likert-scale questions related to graduate training and preparation in different areas of multiculturalism and diversity issues, and 5 Likert-scale questions pertaining to field experience and supervision related to multiculturalism and diversity. Most Likert-scale questions ranged from 1 (*inadequate*) to 4 (*comprehensive*), which related to the adequacy of training, fieldwork, and supervision across different areas of diversity, including race and ethnicity, religion and spiritual affiliations, and sexual orientation. Other Likert-scale questions ranged from 1 (*strongly disagree*) to 6 (*strongly agree*), which pertained to participant attitudes toward whether graduate training, fieldwork, and supervision provided them with multicultural competency as future credentialed professionals in the field of ABA.

Procedure

Upon approval by the university's institutional review board, the survey was submitted to the BACB® for review and approval for distribution through the mass e-mail campaign service provided by the BACB®. Upon approval by the BACB®, the survey was distributed to 22,730 Board Certified Behavior Analyst–Doctoral™ (BCBA-D™), Board Certified Behavior Analyst® (BCBA®), and Board Certified Assistant Behavior Analysts® (BCaBA®) certificants throughout the United States. Requests were also made through international professional associations in ABA to distribute to their membership. The number of members in these associations that the survey was distributed to were unavailable to track response rates. The survey was administered online through an online survey platform called Qualtrics. Data collection remained open for a 2-month period. Upon close of the survey, data were exported from Qualtrics and imported into IBM SPSS Statistics Version 24. Once the data were imported into the software, the data were reviewed and coded by the research team so descriptive statistics (i.e., percentages) could be calculated.

Results

The following section details the findings of the survey and is broken down into three main areas for examination: (a) description of the participants, (b) graduate training, and (c) fieldwork and supervision.

Participants

Overall, there were 575 participants who responded to the survey. Table 1 is a summary of the demographics of the participants by sex and race. The majority of participants were White/Caucasian (82.61%) and female (81.04%). Additional areas to note are under the race category, which includes participants who chose the category of “Other” (4.00%). Most participants who selected this category reported a combination of races, and two people indicated being of Arab descent. Next, with location, although the majority of participants were from the United States (86.26%) and Canada (5.57%), other nations were represented. These nations included Ireland (1.74%), the United Kingdom (1.38%), the United Arab Emirates (1.04%), France (0.35%), Romania (0.35%), and the Bahamas (0.17%), along with a variety of other European and Asian countries. Participants from the United States mostly came from California (13.5%), Massachusetts (9.88%), Florida (9.68%), Texas (7.06%), Pennsylvania (6.65%), New Jersey (5.85%), New York (4.84%), and Connecticut (3.02%). For Canada, the majority of participants came from Ontario (59.38%). The remaining participants were from British Columbia (18.75%), Quebec (12.50%), Prince Edward Island (3.13%), Manitoba (3.13%), and New Brunswick (3.13%). The participants' ages for the entire group ranged from 23 to 75 years of age ($M = 40.13$; $SD = 10.40$). As can be seen by the demographic results, the majority of individuals who hold a BACB® credential who completed the survey were White/Caucasian women. This sample might be representative of the larger population of individuals holding BACB® credentials, but this is unknown.

Table 2 shows information regarding graduate-training degrees, type of university program, and type of fieldwork experience. Under the degrees held by participants with BACB® credentials, there was also an option for “Other” (9.27%), where participants had degrees representative of areas such as speech-language pathology, counseling, subspecialty areas, or combinations of psychology or education, social work, and criminal justice.

Perceptions of Graduate Training and Preparation in Multiculturalism and Diversity

Perceptions of graduate-training curricula were examined by asking how credentialed ABA professionals believed their graduate program prepared them for multiculturalism and working with diverse populations. The results demonstrated that 54.53% of participants indicated that the curriculum content of their graduate-training program addressed working with clients of different racial and ethnic backgrounds (see Table 3). Participants stated that if they did have graduate training in this area, they felt it was *comprehensive* or *adequate*, yet 36.6% viewed their training as either *somewhat*

Table 1. Sex and Race of Study Participants

Certification Level	Sex		Race						
	Male	Female	White/ Caucasian	Black	African American	Asian/ Pacific Islander	Hispanic/ Latin American	Native American/ Indian	Other
BCBA-D™ (N = 84)	29.76%	70.24%	77.38%	3.57%	1.19%	3.57%	9.52%	0.00%	4.76%
BCBA® (N = 452)	16.59%	83.41%	85.40%	2.43%	1.11%	2.43%	4.65%	0.66%	3.32%
BCaBA® (N = 39)	23.08%	76.92%	61.54%	2.56%	2.56%	7.69%	15.38%	0.00%	10.26%
Total Sample (N = 575)	18.96%	81.04%	82.61%	2.61%	1.22%	2.96%	6.09%	0.52%	4.00%

Note. BCBA-D™ = Board Certified Behavior Analyst–Doctoral™; BCBA® = Board Certified Behavior Analyst®; BCaBA® = Board Certified Assistant Behavior Analyst®

Table 2. Graduate Training, Graduate Program Type, and Fieldwork Type of Participants

Certification Level	Area of Graduate Training					Graduate Program Type		Fieldwork Type			Combined Experience	
	ABA	Education	Psychology	Post-MA Certificate in ABA	Other	Online	In-Person	Hybrid	Independent Fieldwork	University Practicum		Intensive University Practicum
BCBA-D™ (N = 84)	40.96%	10.84%	38.55%	4.82%	4.82%	4.76%	82.14%	13.10%	55.95%	8.33%	10.71%	25.00%
BCBA® (N = 452)	34.07%	22.79%	13.27%	23.23%	6.64%	43.58%	43.36%	13.05%	71.68%	8.63%	7.30%	12.39%
BCaBA® (N = 39)	13.51%	2.70%	18.92%	13.51%	51.35%	51.28%	30.77%	17.95%	76.92%	2.56%	5.13%	15.38%
Total Sample (N = 575)	33.74%	19.76%	17.31%	19.93%	9.27%	38.43%	48.17%	13.39%	69.74%	8.17%	7.65%	14.43%

Note. BCBA-D™ = Board Certified Behavior Analyst–Doctoral™; BCBA® = Board Certified Behavior Analyst®; BCaBA® = Board Certified Assistant Behavior Analyst®; ABA = applied behavior analysis

Table 3. Perceptions of Multiculturalism and Diversity Training in ABA Graduate Training

Survey Item	Response		Rating of Adequacy ^a			
	Yes	No	Comprehensive	Adequate	Somewhat Adequate	Inadequate
My graduate-training curriculum content covered providing ABA services to working with clients of different:						
racial and ethnic backgrounds.	54.53%	45.47%	15.69%	47.71%	30.72%	5.88%
religious and spiritual backgrounds.	38.67%	61.33%	10.75%	45.33%	36.92%	7.01%
sexual orientations.	17.77%	82.23%	14.14%	49.49%	34.34%	2.02%

Note. ABA = applied behavior analysis

^a Rating of adequacy only provided if the participant's response was in the affirmative to survey items

adequate or *inadequate*. Overall the graduate-training results showed that participants perceived deficits in training in the areas of working with clients of different religious and spiritual backgrounds (i.e., only 38.67% of respondents identified that they received training in this area). In addition, only 17.77% of respondents indicated they received graduate training in working with clients of different sexual orientations.

Finally, participants responded to an item in the area of graduate training, which stated, “My graduate-training program provided me with multicultural competency as a future credentialed professional in the field of Applied Behavior Analysis.” Results indicated the following ratings: 6.28% responded they *strongly agree*, 23.34% responded they *agree*, 17.95% responded they *somewhat agree*, 24.96% responded they *somewhat disagree*, 20.47% responded they *disagree*, and 7.00% responded they *strongly disagree*. Again, almost half of participants (52.43%) showed some form of disagreement indicating that they believe their training did not provide them with the multicultural competency skills needed as future professionals in the field of ABA.

Perceptions of Fieldwork and Supervision in Multiculturalism and Diversity

The last section of the survey was on multiculturalism and diversity training in regard to fieldwork experience and supervision. The first area examined whether the fieldwork experience provided participants with the knowledge of applying ABA services to working with clients of different racial and ethnic backgrounds. Table 4 comprises the results, which showed that 52.71% of participants indicated that they had the opportunity, but no training was provided, and 10.83% had no opportunity at all. Similar results were found when examining the issue of whether fieldwork provided the participants with the opportunity to apply ABA services to people of different religious backgrounds. In this area, 55.90% had the opportunity, but no training was provided, and 21.23% had no opportunity at all. Last, results showed that only 27.14% of participants had the opportunity to work with individuals with

different sexual orientations, but no training was provided, and 61.75% had no opportunity at all.

Finally, participants responded to two items in the area of fieldwork and supervision. The first item stated, “My fieldwork experience provided me with multicultural competency as a future credentialed professional in the field of Applied Behavior Analysis.” Results indicated the following ratings: 12.25% responded they *strongly agree*, 28.88% responded they *agree*, 20.48% responded they *somewhat agree*, 20.11% responded they *somewhat disagree*, 12.80% responded they *disagree*, and 5.48% responded they *strongly disagree*. The final item stated, “My supervisor provided me with multicultural competency as a future credentialed professional in the field of Applied Behavior Analysis.” Results indicated the following ratings: 10.79% responded they *strongly agree*, 26.87% responded they *agree*, 16.27% responded they *somewhat agree*, 21.94% responded they *somewhat disagree*, 15.54% responded they *disagree*, and 8.59% responded they *strongly disagree*. These results showed that about half of participants perceived their supervisors as having provided them with multicultural competency (46.07% disagreed and 53.93% agreed).

Discussion

Results from the survey indicated that professionals holding BACB® credentials perceived their training, fieldwork, and supervision to be lacking in the area of cultural competency, which confirmed our hypotheses. This is concerning given the nature of the ABA service-delivery model and the diverse clients whom behavior analysts serve. The subsequent sections explore these results further and offer implications and future directions for the field of ABA, while also recognizing the limitations of this study.

Implications

The results of this study highlight a current gap in the field of ABA within the context of preparing culturally competent

Table 4. Perceptions of Multiculturalism and Diversity Training in Fieldwork and Supervision

Survey Item	Opportunity			Response Options ^a			
	Had the opportunity, and training was provided	Had the opportunity, but no training was provided	No opportunity at all	Comprehensive	Adequate	Somewhat Adequate	Inadequate
My fieldwork and supervision experience provided me with the knowledge of applying ABA services to working with clients of different:							
racial and ethnic backgrounds.	36.46%	52.71%	10.83%	26.00%	59.50%	14.50%	0.00%
religious and spiritual backgrounds.	22.87%	55.90%	21.23%	26.19%	59.52%	14.29%	0.00%
sexual orientations.	11.11%	27.14%	61.75%	18.03%	67.21%	13.11%	1.64%

Note. ABA = applied behavior analysis

^a Rating of adequacy only provided if the participant's response was in the affirmative to survey items

behavior analysts, suggesting that more formal and explicit training standards are warranted. Also, the results of the study demonstrate a lack of inclusion of diversity in fieldwork experience and supervision standards in our field, which need to be revised to require individuals in training to become culturally competent behavior analysts capable of working with clients from various backgrounds (e.g., race, ethnicity, sexual orientation, religious and spiritual, socioeconomic status, disability, etc.). Because increased access to training with diverse populations might be difficult for some (e.g., in rural areas), one potential remedy would be for university ABA training programs to create exchange opportunities for students by way of practicum experiences with universities in other parts of the country. This would give students opportunities to learn from professionals and experience working with different populations, either in their own state or across the country.

To improve supervision standards for behavior analysts, requirements could be made for supervisors to receive training on service delivery in multiculturalism and diversity. This would allow supervisors to develop an understanding of not only how these topics impact the delivery of behavior-analytic services but also how one's own culture could also impact the supervisor-supervisee relationship and how that might carry over into behavior-analytic practices and decision-making.

Limitations

One limitation is that the study only had 575 participants, which is a small percentage of the group the survey was sent out to, indicating a 2.5% response rate. There is also a possibility of response bias because participants may have had a personal interest in the topic and thus were inclined to participate. Additionally, due to the low response rate, there is a risk that the sample is not representative of the population of individuals holding a BACB® credential.

Another limitation is that participants were not provided with definitions of the ratings on the Likert scale (i.e.,

somewhat inadequate, inadequate, etc.), which could make the results difficult to interpret. Also, no definition of cultural competency or training was provided to participants, thus leaving what constitutes competency or training up to the participants' interpretations. Along with this, items may have been better suited for the survey if they were designed to assess participants' experiences with specific indicators of cultural competency. For example, participants could have been asked to rate their level of experience in conducting functional communication training with a client who is also an English language learner.

An additional limitation is that the survey did not ask when participants were initially credentialed, thus it was difficult to determine how long ago participants received graduate training or supervision, given that the standards for training, fieldwork, and supervision have evolved over time. Furthermore, participants were not asked whether or not they received training in multiculturalism and diversity issues as part of a different degree program outside of ABA (e.g., psychology, education, social work).

Next, the survey was only given in English and not available in multiple languages, which might have prevented some individuals from participating in the study. Because the survey was sent through international professional associations, there could have been participants who may not have understood the survey questions if English was not their first language. Last, some participants may have opted to not participate in the study because the survey only asked about birth sex, which limited response options regarding sex and gender identity.

Future Directions

This study demonstrates that there is a lack of guidance and standards on diversity from the professional and credentialing bodies in ABA. To remedy this, a good first step would be for the BACB®, ABAAI, and APBA to work collaboratively to develop a framework for cultural competency for behavior

analysts within a practice model like those of other disciplines that have addressed this topic, such as the National Association of School Psychologists' (NASPs') *Model for Comprehensive and Integrated School Psychological Services* (2010a) and the American Psychological Association's (APA's) *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* (2002).

Next, the results highlight a gap in graduate training, the fieldwork experience, and supervision requirements of behavior analysts. Results from this study showed that only about half of the participants had graduate coursework on multiculturalism and diversity issues. The first step to addressing this gap in training would be for the BACB® and ABAI to add standards for training on multiculturalism and diversity issues as part of the VCS approval and accreditation process of ABA graduate programs. From an accreditation perspective, this has already been done successfully by other disciplines through accrediting bodies, such as the Council for Exceptional Children's *Initial Preparation Standards*, Standard 6, Professional Learning and Ethical Practice (Council for Exceptional Children, 2015); APA's standard on Cultural and Individual Differences in Diversity (American Psychological Association, 2010); and NASP's Standard 2.8, Diversity in Development and Learning (National Association of School Psychologists, 2010b).

We should also consider a variety of forms of training, given that research has shown that many psychology programs include different training approaches, such as lecture, discussion, incorporation of case scenarios, cultural immersion opportunities, role-plays, interactions with diverse individuals, self-reflection activities about working with clients, journaling, and service-learning or practicum requirements (Benuto, Casas, & O'Donohue, 2018). The infusion of these strategies into the cultural competency training of professionals led to an increase in knowledge about working with diverse populations, which should translate into clinical practice (Benuto et al., 2018). Within education, teacher preparation programs have been incorporating culturally responsive teaching practices by using student-centered instructional practices, selecting culturally sensitive assessments, and using instructional materials that validate and consider students' cultural, linguistic, and racial identities (Aceves & Orosco, 2014; Brown, 2007). Therefore, programs may want to consider research and best practices from other disciplines regarding how to effectively incorporate multiculturalism and diversity training to help students acquire cultural competency.

The related disciplines of psychology and education also require professionals to have experiences working with diverse populations in these professionals' clinical training and supervision, and assess competency skills obtained through

client outcome data (American Psychological Association, 2010; Benuto et al., 2018; Cooper & Conklin, 2015; Council for Exceptional Children, 2015; National Association of School Psychologists, 2010b; Sue, Arredondo, & McDavis, 1992). It may be useful for graduate programs offering practicum experiences and supervision to learn from health care models about how to incorporate cultural competency into fieldwork. For example, some models develop cultural competency in the delivery of health care services by incorporating cultural awareness (i.e., self-examination of one's own culture), cultural knowledge (i.e., seeking and obtaining an educational foundation about diverse populations), cultural skills (i.e., the ability to collect culturally relevant data and selecting culturally sensitive assessments), cultural encounters (i.e., interacting with clients using a cross-cultural approach), and cultural desire (i.e., understanding the motivation of the professional in wanting to engage in the other aforementioned components) into the components of clinical training (Campinha-Bacote, 2002).

This type of model could be translated into the training of behavior analysts in both coursework and practicum experiences by having students engage in reflective practices and exercises in class and with a supervisor to explore their own cultures and understandings of various other cultures. Students could also be evaluated by supervisors to see if there are noticeable changes in students' behavior toward individuals of different backgrounds from their own because students may not be aware that they might be treating clients differently. In assessment courses and in the field, students can learn to identify ABA curriculum-based assessments or other behavior-analytic evaluation tools that might be free of cultural biases, or take culture into account as part of the assessment process. Additionally, if the student is working with a bilingual client or family, the student can learn how to select appropriate measures that are translated into the client's native language. Students also could be required to have experiences with clients of various backgrounds and have projects in courses aligned with reflecting how culture might play a role in the decision-making process in treatment, particularly in areas such as parent training. And finally, the student could evaluate him- or herself in various areas of cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desire and work with his or her supervisor on improving in these components (Campinha-Bacote, 2002).

With the new requirement in the BACB® Task List (5th edition) to incorporate a supervision training course, there are opportunities to infuse multiculturalism and diversity into clinical supervision practices (Behavior Analyst Certification Board®, 2017). Research has suggested that a supervisor's level of multicultural

competency can impact the supervisee relationship either positively or negatively (Falender, Burnes, & Ellis, 2013; Jernigan, Green, Helms, Perez-Gualdron, & Henze, 2010; Son, Ellis, & Yoo, 2013; Wong, Wong, & Ishiyama, 2013). The BACB® may also want to consider developing standards for culturally competent supervision practices.

Although this study did not examine the continuing education of behavior analysts in multiculturalism and diversity issues, the BACB's® *Professional and Ethical Compliance Code for Behavior Analysts* Code 1.03, Maintaining Competence Through Professional Development, does mention further developing skills as a behavior analyst (Behavior Analyst Certification Board®, 2016). Therefore, the BACB® could institute a requirement for existing behavior analysts to pursue continuing education on multiculturalism and diversity. Related to the results from this study, on the need for fieldwork and supervision to include multiculturalism and diversity training, continuing education courses for supervision to fulfill the 8-hr supervision requirement to become a supervisor, as well as the maintenance of supervisory status, could include this training.

Besides future directions for clinical practice and training, there are suggestions for future research as well. First, this survey was an initial attempt at examining diversity training in graduate school and during fieldwork and supervision. Additional surveys correcting some of the limitations and sent to a broader audience would provide additional support for this need. Another option is to conduct a study examining the curricula of all graduate preparation programs in ABA to see if multiculturalism and diversity issues are already included in the coursework of these programs. This could assist in the examination of curricular-based issues in developing the cultural competency of behavior analysts. Last, an analysis of state licensure laws in behavior analysis could be done to determine if state laws are dictating training in multiculturalism and diversity for licensed behavior analysts. For example, New York State requires graduate coursework in the area of multiculturalism and diversity issues in behavior analysis in order for individuals to be licensed as a behavior analyst in the state (New York State Education Department, 2017). Overall, there is much left to be done on this important topic of multiculturalism and diversity issues in ABA to further the field.

Compliance with Ethical Standards

Conflicts of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical Approval This study obtained institutional review board approval to conform to standards for human participant research.

Informed Consent Informed consent was not needed as participants were anonymous as part of the study.

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