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# Multiculturalism and Diversity Issues in Applied Behavior Analysis

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# Multiculturalism and Diversity Issues in Applied Behavior Analysis By Brian M. Conners

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Department of Educational Leadership, Management, and Policy

Seton Hall University

May 2020





#### APPROVAL FOR SUCCESSFUL DEFENSE

Brian M. Conners has successfully defended and made the required modifications to the text of the doctoral dissertation for the Ph.D. during this **Spring Semester 2020**.

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#### Abstract

The topic of training in diversity and multiculturalism in the field of applied behavior analysis (ABA) has only been discussed within recent years. Minimal research has examined this topic particularly within the scope of training at the graduate level in higher education. Therefore, this paper focuses on examining full time ABA faculty perceptions of multiculturalism and diversity training within their own graduate programs. Furthermore, this paper also presents a call to action related to diversity issues in the field of ABA in terms of graduate students and graduate preparation training and curriculum.

*Keywords:* diversity; behavior analysis; multiculturalism; faculty; graduate students; higher education; diversity training; graduate curriculum; training standards; Applied Behavior Analysis

### **Dedication**

This work is dedicated to my mother, Michele Conners, for always encouraging me to be a trailblazer in my profession and to my loving fiancé, Kristen DiPaola, for always being by my side and supporting me personally and professionally.

Also, in memory of my grandfather, John V. Conners.

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I would also like to acknowledge my colleagues in the Department of Educational Studies at Seton Hall University. I especially would like to thank Dr. Lauren McFadden for your continued friendship and support over the years and pushing me to go on for my doctorate. There are too many of you all to mention one-by-one, but just know that I am forever grateful for everyone's support and that I get to work with such dedicated professionals each and every day to shape the lives of future generations of professionals.

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# **Table of Contents**

Chapter 1: Faculty Perceptions of Diversity Training in Applied Behavior Analysis Gradu  Programs	
Purpose of the Study	2
Background Literature	3
Faculty Perceptions	3
Racial Differences in Faculty Perceptions	5
Theoretical Framework	6
Methods	9
Survey Administration Mode and Length	10
Reliability and Validity	11
Results	13
Discussion	30
Chapter 2: A Call for Understanding Diversity in Applied Behavior Analysis Graduate Programs	35
Background of the Problem	36
Statement of the Problem	38
Examining Diversity in ABA Graduate Curricula	40
Current Training Standards in ABA	45
Understanding Graduate Student Perceptions of Diversity Training in ABA	46
Background Literature on Graduate Perceptions of Diversity Training	48
Efficacy of Diversity Training and Education	48
Graduate Student Perceptions	49
What Was Tried in Evaluating Graduate Training on Diversity in ABA	51
Methods for Evaluating Diversity Training in ABA Graduate Program Curricula	52
Methods for Evaluating Graduate Student Perceptions of Diversity Training in ABA Programs	53
Limitations with Data Collection to Evaluate Diversity Training in ABA Graduate Prog	

Future Directions	56
References	60
Appendix A	66
Appendix B	77
Author's Biography	80

# **List of Tables**

Table 1 Faculty Perceptions of Diversity Training in Applied Behavior Analysis Graduate	
Programs	18
Table 2 Regression Analysis of Faculty Perceptions on the Capability Scale in Relation to	
Overall Diversity Issues in the Field of ABA	22
Table 3 Regression Analysis of Faculty Perceptions on the Capability Scale, Opportunity Items	ζ,
and Motivation Items in Relation to Overall Diversity Issues in the Field of ABA	23
Table 4 Regression Analysis of Faculty Perceptions on the Capability Scale, Opportunity Items	3,
and Motivation Items Controlling for Age, Region, and Rank and Tenure in Relation to	
Overall Diversity Issues in the Field of ABA	25
Table 5 Regression Analysis of Overall Faculty Perceptions of Diversity Issues in the Field of	
ABA Based on Faculty Receiving Diversity Training in Their Own ABA Graduate	
Preparation	28
Table 6 Regression Analysis of Overall Faculty Perceptions of Diversity Issues in the Field of	
ABA Based on Faculty Receiving Diversity Training in Other Disciplines for Graduate	
Preparation	29
Table 7 BACB® 4 <sup>th</sup> and 5 <sup>th</sup> Edition Task List Content Area Requirements for ABAI Verified	
Course Sequences	45

# Chapter 1: Faculty Perceptions of Diversity Training in Applied Behavior Analysis Graduate Programs

The field of Applied Behavior Analysis (ABA) is a younger field in comparison to more established disciplines, such as psychology and education; therefore, in many ways the field of ABA is still evolving. One such area that is at an important crossroads in the field is the lack of graduate training standards on multiculturalism and diversity issues for professionals seeking credentials through the Behavior Analyst Certification Board® (BACB®) including Board Certified Behavior Analysts - Doctoral<sup>TM</sup> (BCBA-Ds<sup>TM</sup>), Board Certified Behavior Analysts<sup>®</sup> (BCBAs®), and Board Certified Assistant Behavior Analysts® (BCaBAs®). For the purpose of this paper multiculturalism and diversity will be synonymous and will be defined as "..."...the differences in race, ethnicity, sexual orientation, gender identity, age, country of origin, religious or spiritual beliefs, ability, and social and economic class." (Association for Behavior Analysis International [ABAI], 2018, p. 1). While the BACB® does produce a Task List that outlines the competencies and skills that future behavior analysts must acquire as part of their graduate coursework, fieldwork, and supervision, there is no mention of diversity training as being a necessary standard. The only mention of diversity related content is briefly found in the BACB® Professional and Ethical Compliance Code for Behavior Analysts, which talks about not discriminating against clients and maintaining professional competency. Having no graduate training requirements for future behavior analytic professionals on diversity issues is concerning because behavior analysts are part of the human service professions and serve a diverse population of clients (Conners, Johnson, Duarte, Murriky, & Marks, 2019; Behavior Analyst Certification Board®, 2017).

Ultimately, this becomes a public policy issue within the field of ABA that needs to be addressed. As in the seminal ABA article, Fawcett and colleagues (1988) mentions about public

policy and behavior analysis that policy change is about using a "...behavior analytic framework for conceptualizing consumer problems and for devising solutions to those problems." (p. 18). In essence, we must use data to drive our decisions in addressing problems. However, no data has been collected to begin to effect change in this area. The first step to developing change in the preparation of future behavior analysts would be to examine the issue of diversity training in higher education. One way of doing that would be to focus on the faculty teaching in ABA programs and begin with collecting data from them on diversity training. The rationale for starting with faculty is because research has often shown that faculty ultimately have the power and control over curriculum content within higher education (Mayhew & Grunwald, 2006; Stark & Lattuca, 1997; Finnegan, 1997). If curriculum reform is to occur, then it is necessary to establish the buy-in from faculty, especially when it comes to the implementation of diversity-related curricula (Hurtado, & Dey, 1997).

Therefore, it would be important to develop an understanding from faculty in ABA programs as to whether or not they perceive diversity training as being needed in the field and if so, what are their perceptions of their ability to create and/or deliver such content within their programs. Additionally, it would be worth understanding what would motivate the faculty to implement diversity training since the faculty would be the ones required to provide the materials as part of their course content. From a policy perspective, this information will be helpful then in understanding policy development and potential barriers in moving diversity training forward within the discipline.

#### **Purpose of the Study**

Given the scarcity of research in this area within the field of ABA, this study aims to contribute to the research literature on faculty perceptions of diversity training. The study seeks to answer the following questions: (1) "What are the perceptions of ABA program faculty on the

need for diversity training?"; (2) "What is the relationship between motivation, capability, and opportunity on overall perceptions of need for diversity training in ABA?"; (3) "Do ABA program faculty who have had diversity training as part of their own graduate preparation perceive diversity training as being needed in ABA more than those who have not?"; and (4) "Do faculty of diverse backgrounds perceive the need for diversity courses/training in ABA differently than White/Caucasian faculty?"

#### **Background Literature**

The subsequent sections will discuss the research literature related to faculty perceptions of diversity training and their influence on policy development. Furthermore, the theoretical framework will be provided for this study as it relates to the literature. It should be noted that since the field of ABA does not have existing research literature in this area, the literature will be reviewed from related disciplines, such as psychology and education.

#### **Faculty Perceptions**

The issue of faculty perceptions in diversity training is not a new issue and has been studied across various disciplines. For example, there have been studies that have examined faculty perceptions of diversity training within higher education. Banks (2018) conducted a study examining community college faculty perceptions of including diversity training throughout community college curricula and of faculty having to participate in diversity training themselves. Results showed the majority of faculty were willing to participate in diversity training since they perceived themselves as not necessarily being culturally competent to teach students the information on diversity. However, Banks (2018) did also highlight that some faculty were resistant to diversity training due to barriers related to time constraints with teaching and other responsibilities, as well as just negative views of the topic of diversity in general due to a lack of awareness of their own biases.

This study brings up valid areas that could be factors for ABA program faculty, such as do ABA faculty even view themselves as culturally competent and would they be able to teach diversity training courses or would they need to participate in training themselves. This would be a valid area to investigate further in this proposed study due to the fact that no ABA faculty would have been required to have diversity training when they became a BCBA® unless they are also trained at the graduate level in a related discipline such as psychology or education. But even then, the diversity training would have been more specific to those disciplines and that knowledge may not necessarily transfer to ABA. School psychology historically had this issue when earlier studies in the 1980s and 1990s found that many faculty did not have diversity training themselves, but did view that diversity training would be important for the training of future school psychologists (Sue et al., 1982; Wyatt & Parham, 1985; Rogers, Ponteotto, Conoley, & Wiese, 1992). Therefore, it seems likely that if history repeats itself, results for ABA program faculty may be similar.

More recent research has examined the perceptions of faculty on diversity training, particularly within school psychology training programs. Krach and Loe (2013) conducted an examination of faculty teaching in school psychology programs to determine their perceptions of diversity training within the programs. These researchers distributed a self-made online survey where participants (N = 86) responded to items on a likert scale (1 = Not at all prepared to 4 = Well prepared). Results indicated that faculty perceived the diversity training that was being provided as favorable in preparing graduate students as future school psychologists in comparison to their own diversity training that they had received when they had received their degree in school psychology. This research to inform the current investigation of examining faculty perceptions of diversity training in ABA programs because there will be survey questions

asking about if as BCBAs teaching in ABA programs did they have training in diversity as part of their programming and how they perceive diversity training in their current program.

Relatedly, within the medical field, research has examined faculty perceptions of diversity training. A study was conducted to evaluate faculty and medical students regarding their perceptions on diversity training within their programs. Participants were asked to complete the Tool for Assessing Cultural Competence Training, which was a 64-item instrument in the areas of knowledge, skill, and attitude toward cultural competence. The results indicated that faculty perceived the inclusion of diversity in the curricula less favorably than the medical students (Lie, Boker, & Cleveland, 2006). Therefore, it is possible that faculty may see the inclusion of diversity training in ABA programs as unnecessary.

Lastly, research from personnel psychology has also examined perceptions of employees in relation to the adoption of diversity training and perceived success of diversity training. This study showed that employees' willingness to include diversity training and the success of the training was contingent upon support from administration and governing bodies (Rynes & Rose, 1995). These findings are relevant for consideration when looking at faculty perceptions of diversity training being included in the curriculum. It can then be speculated that faculty may view diversity training differently since it is not mandated by accrediting bodies in ABA or if their own administration within their ABA program and/or university/college is not supportive of such a training initiative.

#### **Racial Differences in Faculty Perceptions**

Research is scarce when looking at racial differences in faculty perceptions specifically, as research has tend to focus on graduate student perceptions. However, there is an example of educational research that has been done that has examined this issue. Smolen, Colville-Hall, Liang, and MacDonald (2006) found that there were racial differences of education faculty

perspectives of whether or not diversity training is perceived as being needed, if it is successfully included in coursework, and the perceptions of sensitivity to diversity in training future teachers. Overall, those faculty that identified as being part of a racial minority group perceived diversity training as needed for students more than White/Caucasian faculty. Furthermore, faculty of different racial backgrounds also perceived that they were better at including diversity issues into coursework. Minority faculty also viewed themselves as being more sensitive to the diversity needs in training future teachers in comparison to White/Caucasian faculty.

These findings are similar to other studies conducted on faculty including diversityrelated content into their courses. Milem (2001) did a study examining factors contributing to
whether or not faculty would include diversity-related content in their course materials. The
results demonstrated that the demographic variable of race was one of the most influential factors
where faculty of color (except Asian American) were more likely to include diversity-related
content in their courses in comparison to White faculty. Hurtado (2001) also conducted a study
to examine the inclusion of diversity-related content into courses and found that African
American faculty were more likely to include diverse readings, particularly related to racial,
ethnic, and gender issues. Given this information, it would be expected that race of faculty in
ABA programs will have an impact on perceptions of diversity training.

#### Theoretical Framework

Based upon the literature review and the structure of this study, the theoretical framework that will be used is the Capability, Opportunity, Motivation – Behavior (COM-B system), which is based on behavioral theory. Michie, van Stralen, & West (2011) developed the model based upon a systematic literature review of nineteen different frameworks for behavior change as it relates to public policy and interventions that could change a person's behavior. Upon analysis of the different frameworks, the researchers developed a combination of the frameworks reviewed

to the create this new model. The researchers then applied this model to examine public policy issues within the public health sector focusing on interventions for obesity guidelines and tobacco use standards.

In this model "capability" focuses specifically on the person's necessary knowledge and skills to do the behavior. It is inclusive of the physical capability, such as the actual knowledge or skills in order to facilitate a training, as well as the psychological capability, such as imparting knowledge or understanding and training behavioral skills (Michie, van Stralen, & West, 2011). With regard to diversity training, the capability would refer to the person's actual knowledge or skills in facilitating diversity training and ability to impart knowledge on diversity issues to graduate students.

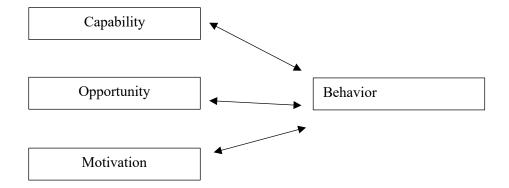
The term "opportunity" refers to factors outside of the individual that make the behavior possible or prompt it (Michie, van Stralen, & West, 2011). For example, if someone has the physical opportunity to do something or the social opportunity to interact with others. So in terms of diversity training this would refer to the person's physical opportunity to facilitate or create diversity training.

Finally, the "motivation" is the individuals actual motivation to do the desired behavior. Motivation includes reflective motivation which relates to acquiring knowledge and understanding as well as being able to elicit positive or negative feelings about the behavioral target. Furthermore, motivation also looks at automatic motivation, which focuses on imitative learning and habit formation (Michie, van Stralen, & West, 2011). For example, with diversity training the motivation could focus on positive or negative beliefs about diversity training and the motivation to form new habits or skills that would challenge someone's preconceived notions about certain diverse groups.

Within this model, all three of these components (i.e., capability, opportunity, motivation) can impact the behavior and vice versa. The model is illustrated below in Figure 1:

Figure 1

Capability, Opportunity, Motivation – Behavior (COM-B system) Model (Michie, van Stralen, & West, 2011)



In terms of the public policy issue related to diversity training in ABA programs, understanding the perceptions of faculty on their capability, opportunity, and motivation is important in leading to the behavior change or behavior target, which would be the actual development and inclusion of diversity training in ABA programs. In this case, the behavioral change which ultimately could be the eventual inclusion of diversity training in ABA programs we may not actually see since the study is focusing solely on faculty perceptions of diversity training.

Based upon the research literature, it would be expected that faculty would view diversity training as being important in ABA programs. However, faculty may not see themselves as being capable of implementing such training in their courses due to perceived lack of skills or knowledge on diversity issues. Additionally, environmental aspects of the department may influence whether or not they would be motivated to include or have the opportunity to develop diversity training. Furthermore, it is anticipated that racial differences will be evident in

responses regarding diversity training across the domains of being needed, capability, opportunity, and motivation.

#### Methods

The subsequent section outlines the population and sampling frame for this study. Furthermore, a discussion of the survey instrument is provided along with the methods of recruitment of participants for the study. Also, a review of the reliability and validity for the survey instrument is included.

#### **Population and Sampling Frame**

The population of individuals that were surveyed for this study were professionals who hold the credential of a Board Certified Behavior Analyst® (BCBA®) or Board Certified Behavior Analyst – Doctoral® (BCBA-D®). These professionals were selected to be surveyed because in order to teach in an ABA program in higher education one must hold either the BCBA® or BCBA-D® credential. Given the focus of the study, this population of professionals is the appropriate group to be targeted for the survey administration. For the focus of this study, only those professionals in the United States were recruited to participate in the survey as the issues of cultural competency and diversity may look different across national and international regions. Therefore, to eliminate that variable the sample has been limited to only the United States for consistency. Lastly, this study limited participants to only being full time faculty because full time faculty are more likely to be able to have the power to make changes in diversity related issues within a department given their ability to develop courses, course content, and vote on curricular issues compared to part-time or adjunct faculty who would not have the same voting rights or power in a university.

The participants that were part of a sampling frame gathered from a list held by the BACB®. The available participants were 30,533 professionals having either the BCBA® (i.e., 28,475) or BCBA-D® (i.e., 2,058) credential in the United States (Behavior Analyst Certification Board®, 2019). However, the list that has the number of professionals holding the BCBA® or BCBA-D® does not have the capability of narrowing the participant pool down to only those professionals teaching in higher education. Therefore, filtering questions were included at the beginning of the survey so only those individuals who work in university ABA programs as full-time were included in the survey. The reason for this is that full-time faculty would have more power to influence curricular decisions about diversity training at the department and university levels than a part-time or adjunct faculty member. In turn, the sample size was smaller than the 30,533 initial participants being recruited and the number of individuals teaching in higher education is unknown. An incentive was provided for participants to be entered into a random drawing for a \$100 Amazon Gift Card in order to encourage participation in the study.

#### **Survey Administration Mode and Length**

The method of administering the survey for this study was through an online survey using Qualtrics. Online distribution was the most cost-effective and efficient way of distributing the survey given that it was sent out nationally. Furthermore, the BACB® maintains a distribution list for email campaigns for survey administration. The BACB® reviewed and approved the study being distributed through their listserve. The survey was distributed once and then a follow up request for completion of the survey was sent two weeks later. Therefore, data collection was open for a month period of time.

As far as the length of the survey, it contains 44 items total and was estimated to take about ten minutes to complete. Appendix A contains the full survey. While it may seem like a lot

of items, the first item is an exclusionary item to determine whether or not the person completing the survey teaches full time in an ABA program. If the person responded "yes" then they moved on to the actual survey items and if they responded "no" then they were sent to a thank you statement at the end of the survey. Survey items were grouped into sets of questions such as demographic, university-related, capability, opportunity, and motivation so each area is on its own separate page in Qualtrics. The survey consisted of the one qualifying question and twenty questions gathering demographic information and understanding of the participants' own training on diversity and teaching background for their current university. The remaining questions were Likert scale questions that ranged from 1 (Strongly Disagree) to 6 (Strongly Agree), which pertained to participant perceptions of diversity training in their own university, their capability, motivation, and opportunity to conduct diversity training, and their overall perceptions of diversity training in the field of ABA. Furthermore, the likert scale items were grouped into a matrix. By structuring the survey in this way, it helped to appear less intimidating to survey participants so they were willing to complete it. Additionally, the number of questions were limited in order to reduce cognitive fatigue.

#### Reliability and Validity

Since the survey is self-made and is not using any existing scales, no reliability or validity data were available. To address the validity issue, the survey was piloted with faculty at Seton Hall University that work in the psychology and education departments that are behavior analytic and non-behavior analytic professionals. During the piloting phase, to establish content validity, a cognitive interview was conducted with these faculty as a means to establish some validity of test items. As part of this process faculty provided me with a description of what they were thinking as they were going through each question. Notes were taken during the interview on their cognitive processes so it could be determined if there were confusion with the wording

of any items or if the items were not measuring what was hoped to be measured. This information was useful in revising or rewording certain survey items before obtaining approval through the Institutional Review Board and actual survey administration. In terms of face validity, items were designed carefully to not develop leading items that will influence participants' responses. Items were derived from the components of the previously reviewed research literature that focused on faculty perceptions of diversity training and factors that influenced those perceptions, such as previous diversity training history, university support and environment, knowledge of diversity issues, etc. The studies reviewed did not have instruments that would measure the necessary components within the current theoretical framework; therefore, the self-made instrument was utilized. Upon completion of data collection reliability analyses were conducted on survey items for the scales of capability, opportunity, motivation, and overall perceptions of diversity in the field of ABA. A reliability analysis was run which yielded the following results for each of the respective scales: capability ( $\alpha = 0.695$ ), opportunity ( $\alpha = 0.25$ ), motivation ( $\alpha = 0.574$ ), and overall diversity ( $\alpha = 0.791$ ). Therefore, the Chronbach's alphas for capability and overall diversity are in the acceptable range, whereas for the motivation scale it is poor and the opportunity scale would be in the unacceptable range.

#### **Data Cleaning and Analysis**

Upon close of the survey, data was exported from Qualtrics and imported into IBM SPSS Statistics Version 25. There were 267 participant responses to the survey. Once the data were imported into the software, listwise deletion was used to clean the data. A frequency count was conducted to determine any missing cases, non-responses, skips, etc. The data was then cleaned of this data and deleted from the dataset. The majority of the data that was deleted were participants who responded to the qualifying question and indicated that they were not full time

faculty, thus disqualifying them from participating in the study. This reduced the data down to 41 participant responses. There were then three additional participants that were deleted since they did not finish the survey and had missing responses. Therefore, the final data set consisted of 38 participants for the study.

Next, likert scale items that were used for the scales related to capability, opportunity, motivation, and overall diversity issues in the field of ABA that were negatively worded were recoded, such that if someone answered 1 = strongly disagree it was recoded to 6 = strongly agree and so on for each response option. Three items were recoded for the capability scale, one item for the opportunity scale, one item for the motivation scale, and two items for the overall diversity issues in the field of ABA scale. This was done in order to be able to run further analysis on reliability for each of the scales (i.e., capability, opportunity, motivation, and overall diversity) since these scales were created as part of the study.

Finally, the variables for region of where faculty were located were recoded and collapsed from West, Midwest, South, and Northeast into West, South, and Northeast since there were so few individuals from the West and Midwest. Furthermore, variables were also combined when it came to rank and tenure status where individuals were grouped into Non-Tenured and Non-Tenure Track, Tenure Track, and Tenured Faculty. After recoding dummy variables where created for both region and rank and tenure status to prepare for regression analyses.

Additionally, the average for the scales for capability, opportunity, motivation, and overall diversity issues in the field of ABA were calculated so it could be used for multiple regressions analysis, which will be discussed in further detail in the results section.

#### Results

The following section reports the results of the survey conducted on faculty perceptions of diversity training in ABA graduate programs. This section is organized by first describing the

demographics of participants of the study and then discussing the results related to each research question.

#### **Participants**

Overall, there were 38 participants for this study. There were 89.47% female and 10.53% males in the study. In terms of race, the majority of participants were White/Caucasian (86.84%). Additional racial demographics consisted of 7.89% Hispanic/Latin American, 2/63% Black, and 2.63% Mixed Race. The average of participants was 40.8 years with a standard deviation of 7.3 years. Participants were from various regions of the United States with 36.84% of the South (i.e., Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Oklahoma, North Carolina, South Carolina, Tennessee, Texas, Virginia, Washington, DC, and West Virginia), 34.21% Northeast (i.e., Connecticut, Maine, New Hampshire, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont), Midwest (Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin), 18.42% Midwest (Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin) and 10.53% West (i.e., Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming). The majority of participants were BCBA-Ds (81.58%) and 18.42% were BCBAs.

In terms of higher education, the majority of participants were teaching at a public four year university program (63.16%) while others were teaching in private four year university (28.95%) or public two year college (2.63%). Lastly, 5.26% indicated "Other" where they specified they were teaching within a professional school. With respect to teaching rank, the majority of participants were at the level of Assistant Professor (44.74%) while 15.79% were at Associate Professor and 15.79% were Instructor level. Furthermore, 7.89% were Full Professor,

5.26% were Lecturer, and 5.26% were Clinical Faculty. Participants did indicate "Other" (5.26%) where they indicated that they were either a director of an ABA program or Faculty Chair. The majority of participants indicated that they were teaching in a Verified Course Sequence (73.33%) or an ABAI accredited Master's program (13.33%). Only 6.67% were teaching in non-approved ABA programs and 6.67% indicated "Other" where they were teaching in programs in accredited programs in related disciplines, such as clinical psychology or special education.

In regard to teaching, the majority of participants taught in traditional in-person university programs (56.25%), while 27.08% taught for online programs and 16.67% taught in hybrid programs (i.e., combination of in-person and online teaching). Most participants were teaching in ABA programs housed in a School of Education (47.37%) while 7.89% were housed in a School of Health Sciences and 2.63% were housed in a School of Human Services. Other participants indicated "Other" (42.11%) where they specified that their programs were housed in colleges for behavior analysis, behavioral and community sciences, liberal arts and science, or colleges specific to psychology. Furthermore, most participants indicated that their ABA program was housed in a department of psychology (36.84%) or education (28.95%). Participants specified that some were housed in their own department of ABA (13.16%), and 21.05% indicated "Other" where they explained that their ABA programs were housed in health professions or child and family studies. Most participants taught in Master's in ABA programs (28.99%) while 24.64% taught in post-graduate certificate programs in ABA or 14.49% taught in Master's in Education with a concentration in ABA. The remainder of participants indicated that they taught in a variety of other program options, such as doctoral programs in ABA (8.7%), Master's in Psychology with ABA concentration (7.25%), Master's in School Psychology with

ABA concentration (1.45%), or Master's in Criminal Justice with ABA concentration (1.45%). Furthermore, 13.04% of participants indicated "Other" where they specified that they taught in undergraduate programs in psychology, doctoral programs in related fields, such as psychology or special education, or in health studies with an ABA concentration. Most participants specified that they teach courses in the Applied branch of behavior analysis (52.86%) with 24.29% indicating they teach within the Basic branch and 15.71% stating they teach in the Experimental branch of ABA. Additionally, 7.14% indicated "Other" where they specified they teach in philosophical, conceptual, and theoretical branches, or in organizational behavior management. Participants indicated that they teach coursework in the following BACB content areas: Concepts and Principles (11.94%), Measurement, Data Display, and Interpretation (11.94%), Behavior Assessment (11.94%), Behavior Change Procedures (10.45%), Experimental Design (10.45%), Philosophical Underpinnings (10.07%), Selecting and Implementing Interventions (9.7%), Ethics (8.58%), Personnel Supervision and Management (8.21%), and Practicum Fieldwork (6.72%).

Lastly, in terms of training of ABA faculty the majority of participants held a graduate degree specifically in ABA (39.62%) and 28.3% had graduate degree in education. Furthermore, 16.98% indicated having a graduate degree in psychology while 7.55% stated they held a Post-MA certificate in ABA. There was an "Other" option where 7.55% indicated that they had training in other disciplines such as social work. Most participants completed their training from traditional in-person university programs (84.21%) while others held degrees from online programs (15.79%). When looking at diversity training 94.74% of participants indicated not having a standalone course on multiculturalism and diversity issues in ABA and only 5.26% did have such coursework. Furthermore, 81.58% of participants indicated not having diversity training infused into their ABA graduate courses while 18.42% stated they did have such

training. Also, the majority of participants (84.21%) indicated that they did not receive diversity training as part of their fieldwork experience while 15.79% stated they did as part of their fieldwork. In regard to if participants received diversity training in a related discipline (e.g., education, psychology, etc.) 55.26% of participants stated they did while 44.74% said they did not.

#### **Diversity Training in ABA Graduate Programs**

Participants answered items in terms of diversity training being offered within their own ABA programs. The majority of participants (89.47%) indicated that their program does not offer a standalone course in multiculturalism and diversity issues in ABA while 10.53% stated they did have a graduate course. However, 73.68% of participants did indicate that diversity training was included throughout various graduate courses in the ABA program while 26.32% identified that it did not include diversity content in courses. Prior to examining the perceptions of the need for diversity training participants answered two items related to their department and diversity training. The first item stated, "Diversity training in my current ABA program that I teach in is well developed to prepare culturally competent behavior analysts." where only 23.68% of participants indicated that they "Agree" with this statement. The next item stated, "My department embraces diversity and multicultural issues in ABA in our culture and climate." where 36.84% indicated "Strongly Agree" and 44.74% indicated "Agree." The next sections specifically examine results as they relate to the initial research questions for this study. Research Question 1: What are the perceptions of ABA program faculty on the need for diversity training?

Table 1 shows the perceptions of ABA program faculty on the need for diversity training in the field across all survey items. The information is grouped based upon the scales of capability, opportunity, motivation, and overall diversity perceptions toward diversity training in

the field of ABA. It should be noted that items are based upon a Likert scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree.

**Table 1**Faculty Perceptions of Diversity Training in Applied Behavior Analysis Graduate Programs

Survey Item	Mean <sup>1</sup>	SD
Capability Scale  I feel as a faculty member in an ABA program that I have the knowledge to teach	4.21	1.09
I would need diversity training in order to effectively teach multiculturalism and	3.05	1.43
I would have the resources as a faculty member needed to implement diversity	4.16	1.18
I would not have time to implement diversity training in our ABA program.*	4.32	1.14
Providing diversity training would take me away from teaching other important concepts in ABA (e.g., philosophical foundations, assessment, etc.). *	4.53	1.22
I know how to be culturally sensitive to the needs of my students that I instruct in the ABA program.	4.63	0.97
Opportunity Scale  If my department allowed it, I would have the opportunity to develop a course on	4.47	1.33
multiculturalism and diversity issues in the field of ABA.	,	

Survey Item	Mean <sup>1</sup>	SD
I am not open to opportunities to infuse multiculturalism and diversity issues in ABA into my existing coursework. *	5.39	1.33
I have the opportunity to include diversity and multiculturalism issues in my existing ABA coursework.	4.76	1.24
Motivation Scale		
I would be motivated to develop courses on multiculturalism and diversity issues in the field of ABA for my program.	4.47	1.37
I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses.*	5.63	0.88
As a faculty member, I am eager to prepare the future generations of behavior analysts to be culturally competent practitioners.	5.63	0.63
Overall Diversity in the Field of ABA		
The field should have training standards through our accrediting bodies that require multiculturalism and diversity training for university programs preparing future behavior analysts.	5.24	0.79
There should be standalone course on diversity and multicultural issues in ABA.	3.76	1.52
Diversity training should be infused throughout all ABA courses.	5.39	0.68
Diversity training should not be included in fieldwork requirements for graduate students in ABA programs.*	5.24	0.91
Graduate students should receive culturally sensitive supervision during fieldwork to become a behavior analyst.	5.39	1.08

Survey Item	Mean <sup>1</sup>	SD
Diversity training is needed in graduate programs in ABA to prepare future behavior analysts to be culturally competent practitioners.	5.32	0.78
The field should not require existing behavior analysts to have credit hour requirements in diversity and multicultural issues for maintaining certification similar to ethics and supervision requirements.*	4.63	1.32

<sup>\*</sup>Indicates recoded for reverse scoring

Table 1 illustrates that overall participants agreed across most items that there is a need for diversity training and that programs should offer such training to produce culturally competent behavior analysts. Upon reviewing these items more closely, it is worth noting that based upon these results participants did not perceive that they themselves would need diversity training in order to effectively teach on multiculturalism and diversity issues in ABA in their courses (M = 3.05). Additionally, they also perceived that they have the knowledge to teach diversity related issues in their courses (M = 4.63). Lastly, the participants were very motivated to want to prepare future generations of behavior analysts to be culturally competent practitioners (M = 5.63).

Research Question 2: What is the relationship between motivation, capability, and opportunity on overall perceptions of need for diversity training in ABA?

To address this research question three regression models were conducted. The regression models were as follows:

#### Model 1

$$overall diversity = \beta_0 + \beta_1 capability + \varepsilon$$

<sup>&</sup>lt;sup>1</sup> Scale that was used was a Likert scale of 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree

The variable of *overalldiversity* represents the total average scores on the scale for overall perceptions of diversity needs in the field of behavior analysis. The *capability* variable is the total average scores on the scale of perceptions related to capability of implementing diversity training.

#### Model 2

 $overall diversity = \beta_0 + \beta_1 motivation + \beta_2 capability + \beta_3 opportunity + \varepsilon$ 

The variable of *overalldiversity* represents the total average scores on the scale for overall perceptions of diversity needs in the field of behavior analysis. The *motivation* variable are the individual items on the motivation scale of perceptions related to motivation for ABA diversity training. The *capability* variable is the total average scores on the scale of perceptions related to capability of implementing diversity training. The *opportunity* variable are the individual items on the opportunity scale of perceptions related to faculty members' opportunities for diversity training in the ABA program.

#### Model 3

 $overall diversity = \beta_0 + \beta_1 motivation + \beta_2 capability + \beta_3 opportunity + age + regions out h + \\ regionwest + nontenured track + nontenured + \varepsilon$ 

The variable of *overalldiversity* represents the total average scores on the scale for overall perceptions of diversity needs in the field of behavior analysis. The *motivation* variable are the individual items on the motivation scale of perceptions related to motivation for ABA diversity training. The *capability* variable is the total average scores on the scale of perceptions related to capability of implementing diversity training. The *opportunity* variable are the individual items on the opportunity scale of perceptions related to faculty members' opportunities for diversity

training in the ABA program. The control variables that were used in Model 3 were in regards to age, geographic region, and rank and tenure status. The *age* variable is the chronological age of participants that were self-reported. The *regionsouth* and the *regionwest* variables were the geographic regions of participants. The northeast region was selected to be omitted to control for its effect in this case due to it being a predominant geographic location in the country. The variable of *nontenuredtrack* refers to participants that did not have tenure and were not on a tenure track and the variable of *nontenured* were individuals that were on a tenure track, but did not receive tenure yet. Therefore, the variable that was controlled for its effects was tenure track faculty which was omitted from the model.

#### **Results for Model 1**

Table 2 illustrates the results of this regression model.

 Table 2

 Regression Analysis of Faculty Perceptions on the Capability Scale in Relation to Overall

 Diversity Issues in the Field of ABA

Variable	В	SE	P
Capability	0.21	0.18	0.24
Constant	4.18	0.69	0.00***

*Note.*  $R^2 = 0.038$ ;  $R^2$  Adjusted = 0.012

p < 0.05; \*p < 0.01; \*p < 0.001

Overall, this model did not yield significant results meaning that including the capability of faculty in conducting diversity training in the model did not impact their overall perceptions of diversity training in the field of behavior analysis.

## **Results for Model 2**

Table 3 contains the results of this regression model.

 Table 3

 Regression Analysis of Faculty Perceptions on the Capability Scale, Opportunity Items, and

 Motivation Items in Relation to Overall Diversity Issues in the Field of ABA

Variable	В	SE	P
Capability	0.12	0.18	0.52
Opportunity Scale			
Develop a course in multicultural and diversity issues in the field of ABA.	0.18	0.09	0.07
I am not open to opportunities to infuse multiculturalism and diversity issues in ABA into my existing coursework. (recoded for reverse scoring)	-0.06	0.08	0.48
I have the opportunity to include diversity and multiculturalism issues in my existing ABA coursework.	-0.11	0.10	0.25
Motivation Scale			
I would be motivated to develop courses on multiculturalism and diversity issues in the field of ABA for my program.	0.06	0.09	0.52
I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses. <i>(recoded for reverse scoring)</i>	0.23	0.15	0.13

Variable	В	SE	P
As a faculty member, I am eager to prepare the future generations of behavior analysts to be culturally competent practitioners.	0.21	0.19	0.29
Constant	1.89	1.15	0.11

*Note.*  $R^2 = 0.379$ ;  $R^2$  Adjusted = 0.234

The results from this regression model do indicate that there were no significant results. However, there areas that are interesting to note, but must interpreted with caution because they are only relevant to this particular sample and cannot be generalized to the overall population of faculty working in ABA programs. First, in this model there was a difference in the R<sup>2</sup> between model 1 and model 2, where the R<sup>2</sup> for Model 1 was 0.038 with a an adjusted R<sup>2</sup> of 0.012 and in Model 2 the R<sup>2</sup> was 0.379 with an adjusted R<sup>2</sup> of 0.234. Particularly within Model 2 the R<sup>2</sup> change was 0.341, which is a significant F-change of 0.03. Meaning that in Model 2 the inclusion of the additional variables of motivation and opportunity did increase the R<sup>2</sup> over just the capability items alone in Model 1. Therefore, the motivation and opportunity items being included did impact the overall perceptions of diversity in the field of ABA.

In terms of actual variables, there were some areas of interest to note. First, a change of one on the opportunity item of "I have the opportunity to include diversity and multiculturalism issues in my existing ABA coursework." has a -0.11 change in their overall perception of diversity in ABA. Additionally, for the opportunity item of "I am not open to opportunities to infuse multiculturalism and diversity issues in ABA into my existing coursework." which was recoded for reverse scoring showed that a change in 1 in that scale is associated with a -0.06 change in their perception of diversity. Furthermore, for the motivation item that was reverse

p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

scored, "I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses." for a change in 1 on that scale there was an increase in their perception of diversity by 0.23.

#### **Results for Model 3**

Table 4 contains the results of this regression model.

**Table 4**Regression Analysis of Faculty Perceptions on the Capability Scale, Opportunity Items, and Motivation Items Controlling for Age, Region, and Rank and Tenure in Relation to Overall Diversity Issues in the Field of ABA

Variable	В	SE	P
Capability	0.16	0.23	0.48
Opportunity Scale			
Develop a course in multicultural and diversity issues in the field of ABA.	0.13	0.11	0.26
I am not open to opportunities to infuse multiculturalism and diversity issues in ABA into my existing coursework. <i>(recoded for reverse scoring)</i>	-0.09	0.10	0.37
I have the opportunity to include diversity and multiculturalism issues in my existing ABA coursework.	-0.12	0.11	0.26
Motivation Scale  I would be motivated to develop courses on multiculturalism and diversity issues in the field of ABA for my program.	0.09	0.11	0.42

Variable	В	SE	P
I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses. (recoded for reverse scoring)	0.22	0.16	0.17
As a faculty member, I am eager to prepare the future generations of behavior analysts to be culturally competent practitioners.	0.20	0.22	0.37
Region West	-0.08	0.33	0.81
Region South	-0.07	0.31	0.84
Non-Tenured	-0.23	0.32	0.47
Non-Tenure Track	0.11	0.36	0.76
Constant	1.47	1.38	0.30

*Note.*  $R^2 = 0.421$ ;  $R^2$  Adjusted = 0.144

Results again in this regression model were not significant. However, there are noteworthy items that will also have to be interpreted with caution as they are only true for this sample and cannot be generalized to the overall population. In this particular model the R<sup>2</sup> was 0.421 with an adjusted R<sup>2</sup> of 0.144. When comparing this to model 2 it indicates that the control variables of age, rank and tenure status, and region did not have significant impact on effects within the regression model.

In terms of the actual variables there are noteworthy areas for consideration. First compared to tenured faculty, people who are non-tenured track have lower scores by approximately -0.23. Additionally, when looking at region, when compared to faculty working in institutions in the northeast, those faculty who are located in the south or the west have lower scores in their overall perception of diversity issues in the field of ABA (i.e., south = -0.07 and

p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

west = -0.08). Furthermore, for the motivation item that was reverse scored, "I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses." for a change in 1 on that scale there was a 0.22 increase in their perception of overall diversity.

Research Question 3: Do ABA program faculty who have had diversity training as part of their own graduate preparation perceive diversity training as being needed in ABA more than those who have not?

In order to address these research questions, two regression models were ran. The regression models were as follows:

#### Model 1

 $overall diversity = \beta_0 + \beta_1 ABA diversity training + age + regions outh + regionwest + nontenure dtrack + nontenure d + <math>\varepsilon$ 

The variable of *overalldiversity* represents the total average scores on the scale for overall perceptions of diversity needs in the field of behavior analysis. The *ABAdiversitytraining* variable were the recoded combination of three survey items that looked at the faculty's diversity training as part of their own ABA graduate preparation. Survey items were combined and recoded as 0 = no and 1 = yes. The items that were recoded and combined were "As part of my training in Applied Behavior Analysis I was required to take a standalone course on multiculturalism and diversity issues in ABA."; "As part of my training in Applied Behavior Analysis multiculturalism and diversity issues in ABA were infused throughout my graduate courses."; and "As part of my training in Applied Behavior Analysis I received diversity training as part of my fieldwork experience." The control variables were the same as previously mentioned in Research Question 2.

#### Model 2

 $overall diversity = \beta_0 + \beta_1 Other Discipline Diversity Training + age + regions outh + regionwest + nontenure dtrack + nontenure d + \epsilon$ 

The variable of *overalldiversity* represents the total average scores on the scale for overall perceptions of diversity needs in the field of behavior analysis. The *OtherDisciplineDiversityTraining* variable were the responses to the item, "Did you receive training in multiculturalism and diversity issues in a related discipline (e.g., education, psychology, etc.)?" which was recoded into 0s an 1s where 0 = no and 1 = yes. The control variables described earlier for Research Question 2 were included here as well.

### **Results for Model 1**

Table 5 contains the results of this regression model.

 Table 5

 Regression Analysis of Overall Faculty Perceptions of Diversity Issues in the Field of ABA

 Based on Faculty Receiving Diversity Training in Their Own ABA Graduate Preparation

В	SE	P
-0.35	0.26	0.18
0.14	0.30	0.63
-0.27	0.30	0.38
-0.04	0.32	0.91
0.14	0.35	0.71
4.13	0.96	0.00***
	-0.35 0.14 -0.27 -0.04 0.14	-0.35 0.26 0.14 0.30 -0.27 0.30 -0.04 0.32 0.14 0.35

*Note.*  $R^2 = 0.421$ ;  $R^2$  Adjusted = 0.144

p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

As illustrated in Table 5 there were no significant results found in the model. There are still some things to note from the results though. First, when compared to faculty who did not have diversity training as part of their ABA graduate program those faculty that did have diversity training had lower scores in their overall perception of diversity issues in the field of ABA by -0.35. Furthermore, when compared to faculty working in institutions in the northeast, those faculty who are located in the south had lower scores (-0.27) in their overall perception of diversity issues in the field of ABA. Lastly, compared to tenured faculty, people who are non-tenured track have lower scores by approximately -0.04.

#### **Results for Model 2**

Table 6 contains the results of this regression model.

 Table 6

 Regression Analysis of Overall Faculty Perceptions of Diversity Issues in the Field of ABA

 Based on Faculty Receiving Diversity Training in Other Disciplines for Graduate Preparation

Variable	В	SE	P
Oth and is similar a Discounity True in in a	0.11	0.20	0.70
Other Discipline Diversity Training	0.11	0.28	0.70
Region West	0.06	0.30	0.84
Region South	-0.35	0.31	0.26
Non-Tenured	-0.10	0.32	0.76
Non-Tenure Track	0.17	0.39	0.25
Constant	4.06	0.99	0.00***

*Note.*  $R^2 = 0.143$ ;  $R^2$  Adjusted = -0.023

p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

As illustrated in Table 6 there were no significant results found in the model. Despite there being no significance there are still some noteworthy items. First, when compared to faculty who did not have diversity training as part of other disciplines those faculty that did have diversity training had higher scores in their overall perception of diversity issues in the field of ABA by 0.11. Furthermore, when compared to faculty working in institutions in the northeast, those faculty who are located in the south had lower scores (-0.35) in their overall perception of diversity issues in the field of ABA. Lastly, compared to tenured faculty, people who are non-tenured track have lower scores by approximately -0.10.

Research Question 4: Do faculty of diverse backgrounds perceive the need for diversity courses/training in ABA differently than White/Caucasian faculty?

After examining the data from the survey, there was not enough diversity within the sample in terms of race (i.e., 86.84% were White/Caucasian) or gender (i.e., 89.47% were female) in order to conduct statistical analyses to answer this research question.

#### Discussion

There is still much to be learned about diversity training in the field of behavior analysis. This study was the first attempt at being able to further understand this issue in the field particularly by focusing on higher education issues and the perceptions of faculty on diversity training in the field. The results of this study, although not significant, do highlight some interesting findings. This section examines the implications of these results, the limitations of the study, as well as future directions for research on this topic in the field of ABA.

## **Implications**

First, participants did not perceive that they themselves would need diversity training in order to effectively teach on multiculturalism and diversity issues in ABA in their courses and they also perceived that they have the knowledge to teach diversity related issues in their

courses. Yet, 94.74% of participants indicated not having a standalone course on multiculturalism and diversity issues in ABA, 81.58% of participants indicated not having diversity training infused into their ABA graduate courses, and 84.21% of participants indicated that they did not receive diversity training as part of their fieldwork experience. Therefore, the question becomes how can faculty teach about diversity specifically in the discipline of ABA if they themselves have not had the training and also do not perceive that they themselves need diversity training to teach future behavior analysts to be culturally competent. This finding is important because it highlights a disconnect between perceptions and reality of the capability of faculty when it comes to diversity training specifically to the field of ABA. A potential reason for this discrepancy between people's confidence and people's training in diversity in ABA is that some faculty indicated that they had diversity training in related disciplines, such as education or psychology and were more confident in their ability to teach diversity in ABA compared to those who had diversity training in ABA. Therefore, it could be speculated that since diversity training has been more established in the related disciplines people feel as though they had better training in diversity whereas in ABA we are just beginning to explore what diversity training looks like in our field.

Next, there does appear to be some impact of region on perceptions of diversity training where the southern region of the United States appeared to have lower perceptions than the northeastern region. It could be argued that the northeast tends to be more progressive on thoughts of diversity and equity. Whereas from a historical perspective the southern region of the United States has struggled when it comes to issues of diversity.

Lastly, there also seems to be some differences between faculty who are tenured or on tenure track versus those who are non-tenured and are not on a tenure track in that those faculty

who are non-tenured and are not on a tenure track have lower scores on their overall perception of diversity training in the field of ABA. This could be concerning if this were to be true for this category of faculty given that the trend in higher education right now is to move away from having tenured faculty (American Association of University Professors, 2018). According to recent reports, non-tenure track positions account for approximately 73 percent of instructional positions in higher education (American Association of University Professors, 2018). Therefore, with the growing number of non-tenured faculty who are not on tenure track it would be concerning if the perceptions of these faculty are less in terms of the overall diversity needs in the field.

Overall, while these are valid implications for the field they are based upon a small dataset that cannot be generalized to the larger population of faculty in ABA. Therefore, these implications while hold true based on the results of this study with this sample and do need to be interpreted with caution.

#### Limitations

A major limitation to this study is that there were only 38 participants which is a small percentage of the group the survey was sent out to indicating a 0.12% 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, which could have impacted the results and may not reflect the perceptions of the larger population of behavior analysts working in ABA graduate programs. Along those lines, due to the low response rate there is a large risk that the sample is not representative of the population of individuals holding a BACB® credential. Another limitation is in terms of the reliability of the actual scales. While the Chronbach's alpha was in the acceptable range for both the capability and overall diversity scales, they were not acceptable or

were poor for the motivation and opportunity scales. Therefore, reliability issues would need to be addressed if this study were to be replicated and better measures would have to be created.

Lastly, the final research question was not able to be answered as part of this study to the lack of diversity within the sample in terms of gender and race. So, unfortunately there is no way to know if faculty of diverse backgrounds perceive the need for diversity courses/training in ABA differently than White/Caucasian faculty.

#### **Future Directions**

This study was an initial attempt at studying this phenomena of faculty perceptions of diversity issues in the field of ABA, which warrants further study due to its potential policy implications for the field, such as the development of diversity training standards for the profession to be used in graduate preparation programs. What would be interesting to do is attempt to run this study again, but instead of using the BACB listserve, actually attempt to gather all faculty emails through data mining of websites for ABA graduate programs. This would allow access specifically to the population of investigation and develop a better understanding of what the actual population size is of ABA faculty. Next, if this study were to be done again reexamine the scales with the lower reliability coefficients and design new items to look to improve the reliability of the scales. Then when administering the survey again it would be suggested to gather contact information for faculty so a follow up study could be done where interviews could be conducted to gain a better narrative and understanding of their perceptions on diversity training issues in the field. Furthermore, this would help to answer research question four and actually address it on a deeper level by developing then an understanding of potential differences on diversity training in the field.

Another option would be to conduct a qualitative research study with ABA program faculty on diversity. By conducting interviews with ABA program faculty, a deeper

understanding of some of the mechanisms at play surrounding motivation, capability, and opportunity may yield useful information. Furthermore, interview data may assist in further understanding the disconnect between faculty training in diversity in ABA and their perceptions of confidence and capability to teach diversity in ABA.

Finally, from a policy perspective for the field of ABA, there are still implications for the need for diversity training. While the results do need to be considered with caution, the fact that most faculty did not receive diversity training specifically to ABA, but yet feel they could adequately teach future generations of behavior analysts to be culturally competent is concerning. This does create a call for action in terms of the need for continuing education mandates on diversity issues specific to the field of ABA. By having these training mandates this would at least require faculty teaching in these programs to gain some sort of formal training on diversity topics that they could have to teach future generations of behavior analysts.

# Chapter 2: A Call for Understanding Diversity in Applied Behavior Analysis Graduate Programs

Within recent years in the field of Applied Behavior Analysis (ABA) there has been a growing dialogue on the topic of multiculturalism and diversity issues. Part of the growth in the conversation had started to occur through the Multicultural Alliance for Behavior Analysis, which is a special interest group of the international ABA professional organization, the Association for Behavior Analysis International (ABAI). This group published a proposed set of standards for cultural competence in ABA. These standards relate to Ethics and Values, Self-Awareness, Cross-Cultural Application, Diverse Workforce, Language Diversity, Professional Education, and Referrals (Fong & Tanaka, 2013, p. 19). This was an initial attempt at offering a framework for professionals in the field of ABA due to a lack of multiculturalism and diversity training standards.

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 to be aware of how culture plays into behavior analytic treatment (Fong, Catagnus, Brodhead, Quigley, & Field, 2016). The need for inclusion of cultural awareness training and coursework in graduate programs and professional development for behavior analysts has also been stressed by various authors, which will be reviewed in more detail later in the dissertation (e.g., Carey & Marques, 2007; Diaz-Lazaro & Cohen, 2001; Fong, Catagnus, Brodhead, Quigley, & Field, 2016; Westefeld & Rasmussen, 2013). Lastly, the ABA journal, *Behavior Analysis in Practice* is released a special issue on *Diversity and Equity in the Practice of Behavior Analysis* in

December 2019. This is the first journal in the field of ABA to dedicate a whole issue to the topic of multiculturalism and diversity.

Further conversations on multiculturalism and diversity issues in ABA have now been circulating at ABA conferences. Over the past year there have been presentations on diversity issues as part of continuing education through webinars and at the larger national conferences for ABAI and the Association of Professional Behavior Analysts. The increased attention to diversity issues in the field is important, but nothing has been done currently to address the training requirements of behavior analysts in multiculturalism and diversity issues at the graduate level prior to becoming practicing behavior analysts. Therefore, this paper is going to provide a review of the background of this issue of lack of diversity training in the field of ABA, discuss the literature on how to evaluate diversity training in graduate curriculum along with understanding the perceptions of graduate students who were consumers of diversity training, offer ways to evaluate this current issue in the field while providing discussion of what was attempted by the author to do such an evaluation and what was learned, and finally offer suggestions for future research initiatives to evaluate diversity training in ABA.

# **Background of the Problem**

Unlike other more established disciplines (e.g., psychology, education, etc.) there are no training requirements to have graduate training or coursework on multiculturalism and diversity issues in the field for professionals holding credentials through the Behavior Analyst Certification Board® (BACB®) (i.e., Board Certified Behavior Analysts - Doctoral<sup>TM</sup> (BCBA-Ds<sup>TM</sup>); Board Certified Behavior Analysts® (BCBAs®); Board Certified Assistant Behavior Analysts® (BCaBAs®)). The BACB® produces a Task List that outlines the competencies and skills that behavior analysts must acquire as part of their graduate coursework, fieldwork, and

supervision The most current BACB® Task List (5<sup>th</sup> edition) does not include any indicators for training requirements in multiculturalism and diversity issues (Behavior Analyst Certification Board®, 2017).

The only mention of information related to multiculturalism and diversity issues can be found in the *BACB® Professional and Ethical Compliance Code for Behavior Analysts* under 1.03: Maintaining Competence through Professional Development, which discusses the importance of maintaining competency in skills and to develop knowledge in new professional areas (Behavior Analyst Certification Board, 2017). Therefore, it could be argued that behavior analysts as part of their continuing education could opt to take a training course on multiculturalism and diversity issues in ABA, but the BACB® does not currently require behavior analysts to have a number of hours in this area like they require four credit hours in ethics and three credit hours in supervision if a behavior analyst serves as a supervisor.

Additionally, the *BACB® Professional and Ethical Compliance Code for Behavior*Analysts mentions diversity issues in 1.05: Professional and Scientific Relationships, which highlights that behavior analysts will not "...discriminate against certain groups of individuals based upon age, gender, race, culture, ethnicity, national origin, religion, sexual orientation, disability, language, or socioeconomic status" and if a behavior analyst does not have experience with any individuals from these diverse backgrounds then "...behavior analysts obtain the training, experience, consultation, and/or supervision necessary to ensure the competence of their services, or they make appropriate referrals." (Behavior Analyst Certification Board®, 2016, p. 5). These ethical and professional standards are important for practicing behavior analysts, but do not address the actual training needs to shape those studying to become behavior analytic professionals in being culturally competent prior to entering the field.

There was a relatively recent announcement of the ABAI now taking over with monitoring and approving verified course sequences (VCS) for graduate programs in ABA, which used to be the responsibility of the BACB<sup>®</sup>. Therefore, much is still yet to be seen if ABAI will begin making any suggestions for changes in training standards in collaboration with the BACB<sup>®</sup> (Association for Behavior Analysis International, 2017). This could be a valuable time during this transition to explore changes to accreditation standards of graduate preparation programs in ABA to include requirements at the graduate level for coursework, fieldwork, and supervision in multiculturalism and diversity issues.

#### **Statement of the Problem**

Having no training requirements for future behavior analytic professionals on multiculturalism and diversity issues is concerning because behavior analysts are part of the human service professions and serve a diverse population of clients. According to data from the BACB® (2018), the majority of behavior analysts work with individuals with autism (67.65%) and developmental disabilities (8.33%), as well as in education sectors for students with disabilities (12.24%). While these are not the only populations or areas that 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.

While there are some demographic data available about behavior analysts, it is not complete. According to Nosik & Grow (2015), the majority of behavior analysts are women (82.2%). This does not necessarily match the gender of individuals being served by behavior analysts as with autism the majority of clients are males, with 1 in 37 boys being diagnosed with autism each year (Autism Speaks, 2018). While gender data has been reported, there is no publicly available demographic data pertaining to certified professionals in ABA through the BACB®, ABAI, or APBA as it relates to race, ethnicity, religious/spiritual affiliation, sexual orientation, or socioeconomic status. Therefore, there is no accessible information on the percentage of behavior analytic professionals identifying as minorities or belonging to other diverse groups. This is concerning because there is no understanding then if the population of professionals are matching the demographics of the populations being serviced with behavior analysis.

Furthermore, this information would be useful for graduate programs in ABA to help give context for the importance of including training and coursework on multiculturalism and diversity issues, but also to highlight a need for encouraging the recruitment of minority students to become behavior analysts. Thus in turn creating a greater pool of diverse professionals to serve the growing diversity of clients with various disabilities and disorders (Autism Speaks Autism Treatment Network, 2014; de Valenzuela, Copeland, & Qi, 2006). Given the trajectory of the growing diversity of the population within the United States and within the populations of clients receiving behavior analytic services, the need for training in multiculturalism and diversity issues is paramount (Autism Speaks Autism Treatment Network, 2014; de Valenzuela, Copeland, & Qi, 2006; U.S. Census Bureau, 2016).

While developing an understanding of the demographics of behavior analysts is a problem, another issue is working on effecting policy change to shape the field of ABA by getting multiculturalism and diversity training required as part of the professional standards for training through the BACB® and ABAI. This in turn would require graduate training programs in ABA to include coursework/training, fieldwork, and supervision on this important topic. The inclusion of multiculturalism and diversity training has been successfully done in related human service professions, such as psychology and education through accrediting bodies such as the Council for Exceptional Children's (CEC) Initial Preparation 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, 2010).

## **Examining Diversity in ABA Graduate Curricula**

Fong, Ficklin, and Lee (2017) indicate that there is a growing need to develop cultureand diversity-related curricula and training opportunities in the field of ABA. These authors
highlight that the theme of multicultural and diversity training requirements in coursework and
field experience standards are prominent in the training of future psychologists through the
American Psychological Association, but these standards in accreditation are lacking for ABA
graduate programs (Fong, Ficklin, & Lee, 2017; American Psychological Association, 2003).
While Fong and colleagues (2017) highlight a need for diversity-related coursework and
curricula for behavior analysts, they do not offer any suggestions of what the content of this
training curricula should look like. Therefore, to close the gap in the ABA research literature in
the area of diversity curricula components it would be important to highlight what is currently

being done in terms of diversity training and where there are current gaps. Additionally, by understanding what is currently being done in the field would also offer suggestions for the development of a standardization in diversity curricula in ABA graduate programs that could also be used to inform accreditation standards for ABA graduate programs. The following sections discuss the research literature associated with common components of diversity training from related disciplines that can be used to analyze ABA graduate training courses and curricula on diversity issues.

#### **Diversity Training Course Elements**

Research has shown that components of diversity training may vary; however, there are some common elements. Rogers (2006) conducted a research study that examined the characteristics of exemplary multicultural training programs in school psychology. The study examined 17 graduate programs in school psychology where semi-structured interviews were conducted with faculty and graduate students in the program. The results of the study identified common characteristics of the programs including that 94% of the programs mandated a diversity course and 88% of the programs used a mixed curriculum model for providing diversity training (Rogers, 2006). The majority of programs had a required practicum or internship component to the diversity training so students gained exposure to diverse populations (Rogers, 2006). Also, some programs required diversity issues to be included within a graduate students' thesis or dissertation (Rogers, 2006). Finally, a small percentage of programs required students to study a second language as part of program requirements (Rogers, 2006).

Course Lectures and Readings. An examination of graduate programs accredited by the American Psychological Association also yielded similar findings of program components (Bluestone, Stokes & Kuba, 1996). This study used a Diversity Rating Form (DRF) questionnaire in order to quantify the inclusion of diversity issues into graduate programming

(Bluestone, Stokes & Kuba, 1996). The DRF was completed by both faculty and graduate students in the program to determine their perceptions of diversity included in the coursework across various domains including ethnicity, gender, aging, socioeconomic status, sexual orientation, religion, and physical disability (Bluestone, Stokes & Kuba, 1996). Results demonstrated that the common components of diversity training in the curricula were through course lectures and assigned course readings. The results indicated that ethnicity, gender, aging, and socioeconomic status were the most thoroughly covered domains of diversity in both course lectures and readings as perceived by faculty and graduate students (Bluestone, Stokes & Kuba, 1996).

Course Assignments. Another area within diversity courses to examine would be the course assignments to see if there are common methods of student evaluation to measure of competency in achieving the stated objectives of preparing more culturally competent practitioners. Murphy, Park, and Lonsdale (2006) conducted a research study that examined the efficacy of a stand-alone diversity course in preparing graduate students in a marriage and family therapy program. The assignments for the course included a combination of awareness assignments along with experiential and didactic components. Assignments including areas such as completion of journals on course readings and reflections of class discussions, facilitating a portion of the class on a particular diversity issue or topic, developing a cultural genogram and describing pride/shame issues in the genogram, a clinical diversity paper where students have to apply how they would work with a family or client with a number of diverse characteristics, and a final exam where students respond to a clinical case study and how they would work with a family were discussed (Murphy, Park, & Lonsdale, 2006).

Graduate students were evaluated pre- and post-participation in the course with a Multicultural Awareness-Knowledge-and-Skills Survey to assess the acquisition of their awareness, knowledge, and skills related to diversity as a result of the course. The results showed that graduate students based upon the assignments and structure of the course felt as though they were more aware, knowledgeable, and skilled in working with diverse populations (Murphy, Park, & Lonsdale, 2006). Building off of the work done in the second proposed study on graduate student perceptions, this study will focus more on the curricular content. Therefore, this literature also suggests another area of examination that is relevant (i.e., course assignments) that could lead to a favorable outcome for preparing culturally competent behavior analysts.

## **Diversity Training Type**

This section focuses on an examination of the research literature particularly about the different types of diversity training methods that are used in practice.

Group-Based Versus Inclusion-Based. Researchers have also highlighted more specifics when it comes to diversity training that would need to be considered when examining diversity training curricula. For example, is the course focused on a specific group or inclusiveness across multiple groups? Or is the diversity course or training based upon raising awareness or more focused on creating behavior change? Bezrukova, Jehn, and Spell (2012) conducted a study where they examined 178 peer-reviewed research articles focused on diversity training across various dimensions including training design. The authors found that through analysis of these studies that participants in diversity training often find training curricula with an inclusive focus to be more positive and are less resistant than those curricula that are hyper focused on specific groups (e.g., race, gender, etc.) (Bezrukova, Jehn, & Spell, 2012).

**Awareness Versus Behavior-Based Training.** Furthermore, Bezrukova and colleagues (2012) focused on the differences in diversity training design that are either awareness-based

versus behavior-based. In awareness-based diversity training, the premise of the course is to allow participants to share their own experiences with each other in the group in working with various diverse populations (Bezrukova, Jehn, & Spell, 2012; Roberson, Kulik, & Pepper, 2001). Furthermore, awareness-based diversity training then looks at developing participants' self-awareness of diversity issues, exposing participants to awareness of different cultural backgrounds, and developing an awareness of one's own cultural assumptions, values, and biases (Bezrukova, Jehn, & Spell, 2012; Baba & Herbert, 2005; Probst, 2003; Robinson & Bradley, 1997). Whereas behavior-based diversity training tends to focus on building skills, while monitoring and changing the participants' actions toward individuals of diverse groups so they can effectively manage working with a diverse client population (Bezrukova, Jehn, & Spell, 2012; Armour, Bain, & Rubio, 2004). However, it should be noted that behavior-based training is rarely used in isolation and will often be mixed with awareness-based training (Bezrukova, Jehn, & Spell, 2012). When examining ABA graduate program curricula on diversity training the curricula can be classified then as more of awareness-based, behavior-based, or mixed training.

### **Training Modalities**

Lastly, it is important to develop an understanding of the types of modalities or methods used in conducting diversity training. Bezrukova and colleagues (2012) found as part of their study that diversity training design fell into two main categories in terms of training instruction as being either one training modality versus multiple methods. This essentially means that diversity training if it was provided in one method, it was either lecture-based only or training based on video materials (Bezrukova, Jehn, & Spell, 2012; Lee, Anderson, & Hill, 2006; Chrobot-Mason, 2004; Kulik, Perry, & Bourhis, 2000). If the training used multiple methods it would often use a variety of instructional strategies including lecture, role-play, experiential components, discussion, videos, panel presentations, home visits, simulated client sessions based

on case analysis, etc. (Bezrukova, Jehn, & Spell, 2012; Juarez et al., 2006). An analysis of the peer-reviewed research articles where studies highlighted that a multi-methods diversity training was used, participants indicated the diversity training to be more favorable in outcomes of participants being more culturally competent than single method trainings (Bezrukova, Jehn, & Spell, 2012; Kolb & Kolb, 2005).

# **Current Training Standards in ABA**

The current standards for accreditation include those from the 4<sup>th</sup> and 5<sup>th</sup> Edition Task Lists. Table 7 below illustrates the breakdown of content covered in course sequences:

**Table 7**BACB® 4<sup>th</sup> and 5<sup>th</sup> Edition Task List Content Area Requirements for ABAI Verified Course Sequences

5 <sup>th</sup> Edition Task List		4 <sup>th</sup> Edition Task List		
BACB® Compliance Code and Disciplinary Systems; Professionalism <sup>1</sup>	45 hrs.	Ethical and Professional Conduct <sup>1</sup>	45 hrs.	
Philosophical Underpinnings; Concepts & Principles <sup>2</sup>	90 hrs.	Concepts & Principles of Behavior Analysis	45 hrs.	
Measurement, Data Display and Interpretation; Experimental Design <sup>1</sup>	45 hrs.	Measurement (including data analysis)	25 hrs.	
		Experimental Design	20 hrs.	
Behavior Assessment	45 hrs.	Identification of the Problem and Assessment	30 hrs.	

5 <sup>th</sup> Edition Task List		4 <sup>th</sup> Edition Task List		
Behavior-Change Procedures; Selecting and Implementing Interventions	60 hrs.	Fundamental Elements of Behavior Change and Specific Behavior Change Procedures	45 hrs.	
		Intervention and Behavior Change Considerations	10 hrs.	
Personnel Supervision and Management	30 hrs.	Implementation, Management, and Supervision	10 hrs.	
		Discretionary	30 hrs.	
Total	315 hrs.	Total	270 hrs.	

<sup>&</sup>lt;sup>1</sup>*Note.* The content must be taught in one or more freestanding courses.

Source: Association for Behavior Analysis International. (2019). Verified course sequence program.

Retrieved from https://www.abainternational.org/vcs.aspx

It would be ideal for diversity training to be infused throughout all graduate courses, which has been suggested in the research on diversity issues (Rogers, 2006).

# **Understanding Graduate Student Perceptions of Diversity Training in ABA**

The development of cultural competencies of graduate students entering human service professions, such as education and psychology, has been a requirement for years as part of the accreditation standards for these fields (American Psychological Association, 2010; Council for Exceptional Children, 2015; National Association of School Psychologists, 2010). However, no such training standards currently exist for graduate students studying Applied Behavior Analysis (ABA) to become Board Certified Behavior Analysts® (BCBAs®) (Association for Behavior Analysis International, 2019). These related disciplines (i.e., education, and psychology) have also conducted numerous studies looking at the efficacy or at least perceived efficacy of these

<sup>&</sup>lt;sup>2</sup>Note. 45-hours must be taught as one freestanding course on concepts and principles.

diversity training programs in their respective disciplines. For the purposes of this paper, efficacy is defined as "the ability to produce an intended or desired result." (Merriam-Webster Dictionary, 2019). Therefore, the desired result of these diversity trainings in graduate programs would be the development of culturally competent professionals.

Understanding the efficacy of a diversity training program is important to determine if the trainings are producing more culturally competent professionals. It is estimated that by the year 2044 more than half of all Americans will belong to a minority group and that by 2060 nearly one in five of the country's total population will be foreign born (Colby & Ortman, 2015). Based upon this projection, the need for culturally competent behavior analysts will be paramount to providing ethical and culturally competent treatment to a diverse population of clients. There are presently only a limited number of ABA graduate training programs providing diversity training as part of their required coursework (Conners, Marks, Duarte, & Murriky, n.d.). Therefore, since the field of ABA is only beginning to examine diversity issues and incorporate training into some graduate programs, it will be useful to understand the efficacy of such programs in preparing culturally competent behavior analysts. Knowing whether or not diversity training is effective can help shape the development of standards for diversity training and may help to inform a model for diversity training curricula for ABA graduate programs.

Studies of efficacy exist in related human service professions to ABA, such as education and psychology. These studies will be reviewed in the research literature in the subsequent section.

Many of these studies have examined graduate students' perceptions of diversity training in related human service professions (i.e., education, psychology, etc.). It is important to understand graduate student perceptions of diversity training because they are the consumers of

the training and would have valuable insight into how the training program prepared them to work with diverse populations. Furthermore, since the graduate students are the future generations of professionals that are being prepared to enter the field, their feedback can be useful in determining what may be working and not be in preparing them to enter the profession.

Given that no research to date in the field of ABA has examined graduate student perceptions of diversity training in ABA graduate programs it would be important as part of a comprehensive evaluation of diversity training in graduate programs to include feedback from graduate students who may have already participated in diversity training as part of their ABA courses.

## **Background Literature on Graduate Perceptions of Diversity Training**

The subsequent section will discuss the research literature related to the efficacy of diversity training, as well as graduate student perceptions of multicultural and diversity training. It should be noted that since ABA has not focused on this issue, the research literature is being drawn upon from related human service professions (e.g., psychology, education, etc.).

### **Efficacy of Diversity Training and Education**

Research over the past few decades has focused on the efficacy of diversity training programs in developing cultural competency of professionals and reducing biases and culturally insensitive behavior (Kiselica, Maben, & Locke, 1999). Kulik and Roberson (2008) conducted a study where they examined research literature on the evaluations of diversity training programs in educational and organizational settings from the 1970s to present to examine common elements of what makes diversity training effective. These researchers found that diversity training programs consistently across all studies were effective in improving a person's knowledge about diversity-related topics and issues and helped change overall attitudes toward diversity. They also found that in the area of application of knowledge about diversity to real

world settings is often lacking in the evaluation literature on diversity training efficacy. The majority of literature tends to focus on an individual's perceptions of their application of knowledge in professional practice rather than objective measures of application of content learned in diversity training in practice. The majority of what we know about the efficacy of diversity training is based upon self-reported efficacy and literature is limited in terms of evaluations based upon objective behavioral change due to the complexities of completing such an evaluation.

#### **Graduate Student Perceptions**

There have been various research studies within the field of psychology and other related human service disciplines that have highlighted graduate student perceptions of the efficacy of diversity training. Some of this research has a long standing history dating back over the past couple of decades. Research by Constantine and Ladany (1996) examined graduate student perceptions of multicultural training counseling in psychology programs. Participants completed a Multicultural Competency Checklist that consisted of self-report items including categories focused on program curricula, fieldwork, and supervision issues. The results showed that students perceived faculty as using varied teaching strategies (e.g., lecture, role-plays, experiential training, etc.) and different evaluation mechanisms to assess learning and performance (e.g., exams, oral presentations, etc.) as being the most effective in leading to their cultural competency.

More recently, Dickson, Jespen, and Barbee (2008) conducted a study examining a national sample of Master's level counseling students' perceptions of diversity training experiences and outcomes on cultural competency. The researchers utilized a variety of standardized instruments (e.g., Quick Discrimination Index, Multicultural Social Desirability Scale, Multicultural Environmental Inventory-Revised) as well as a self-made measure. The

instruments examined program environment, graduate training, fieldwork, and supervision in the domain of diversity. The self-made items examined the curricula in terms of receiving traditional, exposure, and/or participatory strategies for diversity training. Results indicated that those graduate students that perceived the counseling program environment as being more culturally sensitive also viewed their multicultural training as being more enhanced. Another result showed that students' perceived training content that was taught using more experiential and process-oriented strategies was the most beneficial in helping them learn to work with diverse populations (Dickson, Jespen, & Barbee, 2008). These results were similar to an earlier 2004 study on student and faculty perceptions of multicultural training in accredited marriage and family therapy programs also used the Multicultural Competency Checklist to assess participants' perceptions of their diversity training (Inman, Meza, Brown, & Hargrove, 2004). Participants viewed their diversity training as being effective when measured through the Multicultural Competency Checklist in terms of their perceived strengths across the diversity training curriculum content, clinical practice and supervision, as well as presentations on multicultural issues. This study yielded similar results in that students believed that faculty used varied teaching strategies in the classroom that were helpful in developing their knowledge of different cultures. Furthermore, participants perceived multicultural supervision to be an important part of their training process. Finally, participants perceived that exposure to working with diverse clientele was also useful in their training.

Overall, the results from these studies bring forward some additional components to consider when examining graduate student perceptions of diversity training. First, being the culturally sensitive climate of the program and to see how ABA graduate students perceive the climate in their programs as being culturally sensitive or not. Next, the need for experiential and

process-oriented curricula that include field experiences and their perceptions of this in better preparing them to be culturally competent behavior analysts. And finally, whether or not graduate students feel the supervision they received was culturally competent if a fieldwork component was included in the diversity training. In terms of evaluating graduate student perceptions of diversity training in ABA graduate programs, these research studies are good models for the proposed study as it highlights the three major components in ABA programs of coursework, fieldwork, and supervision.

Lastly, research has also examined graduate students' perceptions of the cultural competency of faculty teaching diversity training courses in counseling psychology programs. Counseling psychology doctoral students were put through semi-structured interviews as part of this research study to gather their perceptions among various domains such as faculty expertise, faculty-student relationships, and faculty limitations. Results showed that participants often spoke about the importance of faculty having multicultural expertise in knowledge, experience, and skills, being self-aware, and open to cultural experiences. Furthermore, in terms of faculty-student relationships participants perceived faculty more positively when teaching diversity courses when they could challenge students to considerate the influence of their own cultural background and helping students to feel as though they are on this journey of multicultural competency together. Finally, the results also indicated faculty limitations in diversity training courses as perceiving faculty members who were defensive, invalidating to students, and would avoid certain topics of discussion as hindering their diversity training experiences (Koch et al., 2018).

### What Was Tried in Evaluating Graduate Training on Diversity in ABA

This author had attempted to evaluate the components of diversity training outlined in this paper both from a curriculum standpoint along with understanding graduate student

perceptions of diversity training. The next section describes the methods attempted for evaluating the diversity training in the ABA graduate programs.

# Methods for Evaluating Diversity Training in ABA Graduate Program Curricula

The author attempted to evaluate the content of syllabi from ABA graduate programs that offered standalone diversity courses in ABA. Those universities were Daemon College, St.

Joseph's College, Long Island University, Hunter College, Grand Valley State University,
University of Rochester, Missouri State University, University of Massachusetts-Boston, Touro
College, Manhattanville College, and Chicago School of Professional Psychology. These
universities were identified as part of a previous study that had examined diversity course
offerings by ABA graduate programs done by the author and his colleagues (Conners, Marks,
Duarte, & Murriky, n.d.). Seton Hall University was a university on the list originally, but was
omitted from the attempted data collection due to a conflict of interest with the author being a
faculty member in the program who designed the course. All course syllabi from the nine
institutions were requested for the ABA programs in order to allow an examination of all syllabi
to see if multicultural and diversity issues are covered throughout the program or only within the
standalone diversity course.

In order to gain access to the syllabi for the study, an email solicitation was sent to the ABA program directors from the universities requesting to share the syllabi for the purposes of this study. In the solicitation email, it was explained to the program directors that they have been chosen for the study because somewhere within their ABA program or related degree granting program with an ABA concentration, they have a course covering multicultural and diversity issues in ABA specifically. The program directors were told that the purpose of the study was to understand the similarities and differences in diversity training components in ABA programs. Since there are only a small number of ABA programs that have diversity courses in ABA, the

author let the program directors know that this is not an audit of their program, but a means to gather information about a larger picture of understanding diversity training in the field of ABA.

Furthermore, it was explained that the study was looking at training components and not necessarily whether or not the program itself is effective in implementing diversity training. It was also explained that the syllabi were only to be shared with the author and dissertation mentor for the purposes of data analysis and the syllabi themselves would not be published as part of the study. Additionally, it was made clear to program directors that the only identifying component that would be published would be the name of the university, but that data would be aggregated in a way that their university could not be identified to the data source since the data was being coded using categories from the research literature.

# Methods for Evaluating Graduate Student Perceptions of Diversity Training in ABA Programs

In an attempt to understand graduate student perceptions of diversity training in ABA graduate programs, the author tried to recruit graduate students from institutions that have a standalone graduate course in multiculturalism and diversity issues that are within ABA programs. Those universities were the same institutions previously mentioned above because those universities had standalone diversity courses in ABA.

In order to collect the data for this study, a request was sent via email to the same ABA program directors of each university that have a standalone ABA course on multiculturalism and diversity issues asking them to send an email solicitation to current graduate students in the program who have completed the ABA diversity course. It should be noted that this request was included in the specific request for the above mentioned participation in the syllabi review study described earlier. The decision was made to send one solicitation email for both studies as to not overburden the program directors with multiple emails. The email solicitation to the program

directors explicitly stated that the data is for use in the specific study on graduate students and would not be shared with the program directors. The program directors were asked to send the email solicitation to those graduate students that have participated in the standalone multiculturalism and diversity course since they were the only ones eligible for participation in the study as the author was wanting to understand their experiences in the standalone course and not other courses in the ABA sequence. As part of the solicitation letter to the graduate students, the students were told that all data would not be shared with their program directors in order to help alleviate any element of coercion for participation in the study and to eliminate any sort of response bias. Graduate students were requested to complete an online form to fill out their name, contact information, time availability, and to answer a question confirming the completion of the diversity course to affirm eligibility for the study. The author was then going to schedule interviews with those graduate students that volunteered to participate in the study.

In order to collect the necessary data, a semi-structured interview process was going to be used to gather graduate student perceptions of whether or not participating in a graduate course on multiculturalism and diversity issues prepared them to become more culturally competent. Appendix A contains a list of the interview questions that were going to be used as part of this study. In order to gather this information, interviews would have been conducted virtually through Zoom videoconferencing software. As part of the interviews the author would be collecting rich data (i.e., "thick description") where the data was going to be detailed from the interview to develop a full and revealing picture of what was happening in the graduate students' experiences in the diversity training (Maxwell, 2004). The author was going to do this by having the graduate students participating in the interviews describe in detail the process of how diversity training was facilitated and provide information on how and why the training was either

effective or not in developing their cultural competency. For example, graduate students were not going to be asked to just simply whether the diversity course made them culturally competent, but rather how and why this training was beneficial in achieving cultural competency.

It was estimated that interviews would take approximately 90 minutes to conduct with the graduate students. A transcript of responses to interview questions would have been created for each graduate student interview. Additionally, the author was going to collect memos and notes to gather contextual information during interviews, such as body language. Furthermore, while conducting the interviews the author would be doing member checks to verify that data that was being collected was accurate. Maxwell (2004) describes member checks as soliciting responses from participants during an interview to check one's data and conclusions to ensure accuracy in the data so no misinterpretations of perspectives and meanings due to one's own biases and assumptions. The author would have done member checks throughout the interviews by summarizing responses and asking participants for feedback on the accuracy of the author's accounts of what they were saying.

# Limitations with Data Collection to Evaluate Diversity Training in ABA Graduate Programs

The studies that were attempted by the author unfortunately were not able to be conducted due to issues with data collection. Despite sending solicitation emails to the program directors, including an initial request and a follow-up request with hard deadlines for participation, the author only received syllabi from one university and no sign ups for graduate students to participate in the study. Another university did respond and say that they would have to check with the university about sending the syllabi because they were unsure if they were able to publicly distribute the syllabi due to it being intellectual property of the university. The

program directors from the other universities did not respond or acknowledge the emails.

Additionally, it is assumed based upon the zero response rate that the ABA program directors never forwarded the email solicitation to the graduate students in their programs.

There are a few reasons as to why the author may not have been able to gain participants for these studies. For the first study on the examination of course syllabi one of the main reasons, which was not thought of prior to designing the study, is that since the author is a faculty member in a competing ABA program, the universities that were solicited for participation in the study may not have been comfortable sharing program syllabi for fear of the syllabi being used by the author to improve or enhance the ABA program at the author's university. Another potential issue with gathering data for this study may be that each university may not allow for syllabi to be shared for research purposes since it is the intellectual property of the university. Lastly, for this study the program directors may already be overwhelmed with other duties and responsibilities that they are not able to take the time to compile all syllabi to share with the author for participation in the study. For the graduate student study, similar issues could have occurred with data collection including that program directors may not have the time to solicit students by sending the email recruitment letter for the author. Furthermore, the program directors may not have wanted the author to have access to the graduate students to learn about the diversity curriculum and their experiences because the author is from a competing ABA program. Lastly, even if the program directors did send the solicitation graduate students may not have had the time to participate or since there was no incentive may not have found the response effort to participate to be rewarding enough.

#### **Future Directions**

The examination of diversity training in ABA graduate programs as well as understanding graduate student perceptions of diversity training they have experienced as part of

their graduate preparation are important in order to further the conversation about diversity in the field and lead to policy changes professionally, such as development of training standards on diversity. However, in order to do this both of the aforementioned studies would need to be conducted and the data collection issues addressed in order to actually have the data available to study both phenomena. Therefore, this section will propose suggestions to address the data collection issues and weigh the pros and cons of each of these ideas.

For the syllabi study, the most efficient way to do this would be to partner with ABAI to conduct the study. Since ABAI is responsible for the approval of the VCSs and accrediting masters and doctoral programs in ABA, they could request for the most recent versions of program syllabi for every course within the programs. By partnering with ABAI, program directors would essentially be required to give the syllabi as part of the accreditation process, therefore, eliminating the option for program directors to participate and guaranteeing a response rate. Furthermore, if it is done in partnership with ABAI and the data will then be used and published with members of ABAI it will provide additional credibility and eliminate concerns of program directors thinking the author would be using it for improving the author's ABA program. A couple of drawbacks of going this route would be: (1) whether or not ABAI would be willing to partner with the author on such an initiative and (2) if they do partner, then there is in a way coercion being used to have program directors give their syllabi since it would be ABAI wanting the syllabi and they are responsible for the approval or rejection of renewal of accreditation of the programs.

For the graduate student perceptions study, there are a couple of options to remedy data collection issues here. First, one option would be to solicit graduate students through other avenues, such as social media or student membership lists from professional organizations. For

example, there is a Students of Behavior Analysis Facebook group where a solicitation could be posted. Students could then click on a link in that solicitation where they could be directed to a brief questionnaire that could have items to determine eligibility for the study, such as "Does your graduate program cover diversity issues as part of your ABA graduate training?" If students, answered "yes" then they could be directed to fill out contact information to be scheduled for an interview. A limitation to this would be that it would be harder to understand if this is a representative sample of graduate students and representation of various university programs. Something similar could also be sent to student membership listserves for each state ABA association; however, a drawback to this is that the ABA association may not allow access to that list or be willing to send it out for distribution. With both options another concern with sampling would be that participant signing up may have a specific interest in the topic so the perceptions or opinions expressed may not represent that of the larger population of graduate students in ABA programs who had diversity training.

Additionally to get participants for the graduate student study, an incentive may need to be offered, such as being entered into a random drawing for a \$100 Amazon gift card, because the study does require participation in an interview that would last approximately 90 minutes. Graduate students may not see the response effort required to be worth participating without having some incentive in place. Alternatively, the study could be re-examined to lessen the number of interview questions, which in turn could shorten the interview time. This could potentially increase the likelihood of graduate students being more willing to participate. However, the downside to that would be the risk of losing an opportunity to gain valuable data that could be used in the qualitative analysis.

Lastly, a case study of one program may also be a viable option to begin understanding multiculturalism and diversity issues in behavior analysis. Since there was one university that provided course syllabi they may be a good starting point to interview faculty and graduate students to develop a deeper understanding of the topic. A mixed methods approach could then be used where survey and interview data could be collected from the ABA graduate program that would be a focus of the case study. This may provide valuable data that can then inform further research and perhaps would build trust between the researcher and other universities that may then be willing to participate in future projects.

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### Appendix A

### **Faculty Survey on Perceptions of Diversity Training**

<u>Directions</u>: Thank you for being willing to complete this survey on diversity and multiculturalism training in graduate programs in the field of Applied Behavior Analysis. This survey will take approximately10 minutes to complete. Please read and answer each question completely. Thank you in advance for your participation!

Qι	nalifying Question
1.	Do you teach in a university program in Applied Behavior Analysis as a <b>full time</b> faculty member?  Yes  No
*I1	f yes, proceed to next section.
	f no, thank you message will be displayed for participating and the individual will be cluded from the survey.
De	emographics
2.	I am:         ☐ Male         ☐ Female         ☐ Other (please specify):
3.	My race is:  White/Caucasian  Black  African American  Native Hawaiian or Other Pacific Islander  Hispanic/Latin American  Native American  American Indian  Alaska Native  Middle Eastern or North African  Other (please specify):
4.	My age is:

5.	Please select your location by region of the United States:  West
	Midwest
	South
	☐ East
	I teach at a:  Public four year university Private four year university Public two year university Private two year university My rank is: Instructor Lecturer Faculty Associate Clinical Faculty Associate Professor Assistant Professor Full Professor Professor Emeritus Other (please specify):
8.	I teach in a(n) (check all that apply):  Verified Course Sequence  ABAI-accredited Master's Program  ABAI-accredited Doctoral Program  Non-approved ABA program  Other (please specify):
9.	I teach in the following type of program (check all that apply):  Online program Traditional in-person university program Hybrid program
10.	I teach in the following program(s):  Post-graduate certificate in ABA  Doctoral program in ABA  Master's in ABA  Master's in Education with ABA concentration  Master's in Psychology with ABA concentration

	Master's in School Psychology with ABA concentration
	Master's in Counseling with ABA concentration
	Master's in Social Work with ABA concentration
	Master's in Speech-Language Pathology with ABA concentration
	Master's in Criminal Justice with ABA concentration
	Other (please specify):
11.	My ABA program is housed in a:
	College of Education and Human Services
	College of Arts and Sciences
	College of Health and Medical Sciences
	Uther (please specify):
12	My ABA program is in the department of:
14.	ABA
	Education
	Psychology
	Counseling
	Other (please specify):
	United (piease specify).
13.	I teach courses within which of the following branches of behavior analysis (check all that
	apply):
	Basic
	Applied
	Experimental
	Other (please specify):
	I teach courses within which of the following BACB content areas (check all that apply):
	Philosophical Underpinnings
	Concepts and Principles
	Measurement, Data Display, and Interpretation
	Experimental Design
	Ethics
	Behavior Assessment
	Behavior-Change Procedures
	Selecting and Implementing Interventions
	Personnel Supervision and Management
	Practicum Fieldwork

15.	I am a:  Board Certified Behavior Analyst – Doctoral (BCBA-D)  Board Certified Behavior Analyst (BCBA)  Board Certified Assistant Behavior Analyst (BCaBA)
16.	Please identify your training in behavior analysis:  Graduate degree in behavior analysis  Graduate degree in education  Graduate degree in psychology  Post-MA certificate in Applied Behavior Analysis  Other (please specify):
17.	I completed my graduate training in Applied Behavior Analysis through a(n):  Online program  Traditional in-person university program  Hybrid program
18.	As part of my training in Applied Behavior Analysis I was required to take a standalone course on multiculturalism and diversity issues in ABA.  Yes No
19.	As part of my training in Applied Behavior Analysis multiculturalism and diversity issues in ABA were infused throughout my graduate courses.  Yes No
20.	As part of my training in Applied Behavior Analysis I received diversity training as part of my fieldwork experience.  Yes No
21.	Did you receive training in multiculturalism and diversity issues in a related discipline (e.g., education, psychology, etc.)?  Yes No *If yes, what discipline? Psychology Education Social Work

☐ Counseling ☐ Other (please specify):	
*If yes, as part of my train multiculturalism and diver Yes  No	ing in this other discipline I took a standalone course on sity issues.
*If yes, as part of my train were infused throughout n  Yes  No	ing in this other discipline multiculturalism and diversity issues by graduate courses.
*If yes, as part of my train my fieldwork experience.  Yes No	ing in this other discipline I received diversity training as part of
Diversity in the University	
22. My current university AB multiculturalism and diver Yes	A program that I teach in offers a standalone course in sity issues in ABA.
23. My current university AB issues in ABA throughout  Yes  No	A program that I teach in offers multiculturalism and diversity various graduate courses.

# Please rate your level of agreement with the following statements.

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
24. Diversity training in my current ABA program that I teach in is well developed to prepare culturally competent behavior analysts.						
25. My department embraces diversity and multicultural issues in ABA in our culture and climate.						

# **Capability**

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
26. I feel as a faculty member in an ABA program that I have the knowledge to teach diversity related issues in my courses.						
27. I would need diversity training in order to effectively teach multiculturalism and diversity issues in my courses.						

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
28. I would have the resources as a faculty member needed to implement diversity training.						
29. I would not have time to implement diversity training in our ABA program.						
30. Providing diversity training would take me away from teaching other important concepts in ABA (e.g., philosophical foundations, assessment, etc.).						
31. I know how to be culturally sensitive to the needs of my students that I instruct in the ABA program.						

# **Opportunity**

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
32. If my department allowed it, I would have the opportunity to develop a course on multiculturalism and diversity issues in the field of ABA.						
33. I am not open to opportunities to infuse multiculturalism and diversity issues in ABA into my existing coursework.						
34. I have the opportunity to include diversity and multiculturalism issues in my existing ABA coursework.						

## **Motivation**

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
35. I would be motivated to develop courses on multiculturalism and diversity issues in the field of ABA for my program.						
36. I would not be willing to participate in diversity training in order to enhance my teaching of multiculturalism and diversity issues in my ABA courses.						
37. As a faculty member, I am eager to prepare the future generations of behavior analysts to be culturally competent practitioners.						

# Field of Behavior Analysis

Item	1	2	3	4	5	6
	Strongly	Disagree	Somewhat	Somewhat	Agree	Strongly
	Disagree		Disagree	Agree		Agree
38. The field should						
have training						
standards through						
our accrediting						
bodies that require						
multiculturalism						
and diversity						
training for university						
programs preparing						
future behavior						
analysts.						
39. There should be						
standalone course						
on diversity and						
multicultural issues						
in ABA.						
40. Diversity training						
should be infused						
throughout all						
ABA courses.						
41. Diversity training						
should not be included in						
fieldwork						
requirements for						
graduate students						
in ABA programs.						
42. Graduate students						
should receive						
culturally sensitive						
supervision during						
fieldwork to						
become a behavior						
analyst.						

Item	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
43. Diversity training is needed in graduate programs in ABA to prepare future behavior analysts to be culturally competent practitioners.						
44. The field should not require existing behavior analysts to have credit hour requirements in diversity and multicultural issues for maintaining certification similar to ethics and supervision requirements.						

#### Appendix B

#### **Semi-Structured Interview Questions**

#### **ABA Program Environment**

- 1. How would you describe your ABA program's environment in regards to diversity and multicultural issues?
- 2. What are some areas that the ABA program could improve its environment to be more culturally sensitive? Why would these areas enhance the environment to be more culturally sensitive?
- 3. What does the ABA program do well in providing a culturally sensitive environment? Why are these areas important to developing a culturally sensitive environment?

#### **ABA Faculty**

- 1. How would you describe the cultural competency of the faculty in the ABA program?
- 2. How would you describe the knowledge and expertise of your faculty/course instructor for the standalone multiculturalism and diversity course?
- 3. How would you describe the coverage of multiculturalism and diversity issues in your other ABA courses?
- 4. How would you describe the faculty-student relationships in terms of cultural awareness and sensitivity?
- 5. What would you say are some limitations of the faculty when it comes to cultural awareness and knowledge? Why do you view these areas as limitations?
- 6. How would you describe the diversity training you received in your ABA program?

#### **Diversity Coursework**

- 1. How would you describe the diversity coursework you received?
- 2. How was the diversity training taught?

- 3. Was there fieldwork/experiential components to the training? If so, how would you describe those components? What value do you believe this brought to the course or was it not beneficial and why?
- 4. How would you describe the course content in terms of lectures, readings, films, etc.?
- 5. How was the course content conveyed? What did you find effective about the instructional strategies used? Why were these instructional strategies so effective? What did you find was ineffective with instruction? Why were these instructional strategies ineffective?
- 6. How were you evaluated as part of the diversity training? What was valuable about these evaluation strategies? Why were these evaluation methods so useful? What evaluation strategies did you find to not be useful? Why were these evaluation methods not useful?
- 7. Do you feel as though the diversity training you received through your coursework made you a more culturally competent practitioner as a future BCBA? How did the training coursework make you more culturally competent or not? Why do you feel as though the diversity training coursework made you more culturally competent or not?
- 8. What do you feel was done well in the coursework for diversity training to best prepare you to become a more culturally competent future BCBA? Why do you feel it best prepared you to become more culturally competent?
- 9. What do you feel could have been done differently in the coursework for diversity training to better prepare you to become more culturally competent? Why do you think these areas would help improve diversity training?

#### **Fieldwork**

- 1. How would you describe your fieldwork in the ABA program in relation to diversity and multicultural issues? Were you able to gain experiences in working with diverse populations across different dimensions of diversity, such as race, gender, sexual identity and orientation, disability, religion, etc.?
- 2. Do you feel as though the fieldwork you received through the ABA program made you a more culturally competent practitioner as a future BCBA? How did the fieldwork make

you more culturally competent or not? Why do you feel as though the fieldwork contributed to you becoming more culturally competent or not?

- 3. What do you feel was done well with your fieldwork to best prepare you to become a more culturally competent future BCBA? Why do you feel it best prepared you to become more culturally competent?
- 4. What do you feel could have been done differently with fieldwork to better prepare you to become more culturally competent? Why do you think these ares would help improve diversity training in fieldwork?

#### **Supervision**

- 1. How would you describe your BCBA supervisor in terms of cultural competency? Would you receive supervision that was inclusive of multicultural and diversity issues?
- 2. Do you feel as though the supervision you received through the program by a BCBA supervisor mad you a more culturally competent practitioner as a future BCBA? How did the supervision make you more culturally competent or not? Why do you feel as though the supervision made you more culturally competent or not?
- 3. What do you feel was done well in the supervision to best prepare you to become a more culturally competent future BCBA? Why do you feel it best prepared you to become more culturally competent?
- 4. What do you feel could have been done differently with supervision to better prepare you to become more culturally competent? Why do you think these areas would help improve diversity training and multicultural supervision practices?

December 12, 2019

Re: Study ID# 2020-015

Dear Dr. Conners,

At its December meeting, the Research Ethics Committee of the Seton Hall University Institutional Review Board reviewed and approved your research proposal entitled "Faculty Perceptions of Diversity Training in Applied Behavior Analysis Graduate Programs" as submitted. This memo serves as official notice of the aforementioned study's approval as exempt. Enclosed for your records are the stamped original Consent Form and recruitment flyer. You can make copies of these forms for your use.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol, informed consent form or study team must be reviewed and approved by the IRB prior to their implementation.

You will receive a communication from the Institutional Review Board at least 1 month prior to your expiration date requesting that you submit an Annual Progress Report to keep the study active, or a Final Review of Human Subjects Research form to close the study. In all future correspondence with the Institutional Review Board, please reference the ID# listed above.

Thank you for your cooperation.

Sincerely,

Mara C. Podvey, PhD, OTR

Associate Professor

Co-Chair, Institutional Review Board