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Understanding the Behavior Therapist Shortage in Florida

Final Research Study Report

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Note

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Abstract

The University of Florida (UF) and the University of Miami (UM) received a grant from the Florida Developmental Disabilities Council, Inc. to investigate the shortage of behavior analysis services in Florida, focusing on autism and other intellectual and developmental disabilities. Despite an increase in Registered Behavior Technicians (RBTs), there's still a significant shortage, especially in rural areas. Studies show that supervisor support, job satisfaction, and fair pay are critical for employee retention (Gibson et al., 2009; Kazemi et al., 2015). The COVID-19 pandemic worsened job insecurity and burnout among behavior therapists (Jimenez-Gomez et al., 2021). To address this issue, this comprehensive project was initiated, involving a task force, environmental scan, focus groups, interviews, and surveys. The final report offers recommendations to improve access to behavioral services in Florida, encompassing factors like job-employee fit, supportive work environments, strong supervision, training, and fair compensation. Overall, this project seeks to identify the factors contributing to the shortage of behavior therapists and enhance the quality of behavioral services in Florida.

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Part 1: General Introduction and Environmental Scan

Introduction

The University of Florida (UF) and the University of Miami (UM) were awarded a grant from the Florida Developmental Disabilities Council, Inc. (FDDC). The purpose of this project was to understand the current status of behavior analysis services in the state of Florida. Prior research has demonstrated that individuals with autism spectrum disorder (ASD) and other neurodevelopmental disorders are at a higher risk of engaging in challenging behavior (e.g., aggression, self-injurious behaviors, and other destructive or disruptive behaviors; Horner et al., 2002). The most recent prevalence statistics released by the Centers for Disease Control and Prevention estimate that about 1 in 36 8-year-old children have ASD (or 27.6.0 per 1,000 8-year-olds; Maenner et al., 2023). According to the Behavior Analyst Certification Board (BACB), the number of active RBTs has increased significantly in recent years, with over 113,000 RBTs worldwide as of August 2021. However, this increase has not been enough to meet the growing demand for applied behavior analysis (ABA) therapy services. The BACB has stated that the demand for RBTs is projected to continue to outpace the supply, leading to a persistent shortage of qualified professionals. Shortages of behavior therapists have been reported at all levels (e.g., certified behavior analysts, certified and uncertified behavior technicians), and those shortages are reportedly more prominent in rural communities in which there are no reported certified behavior analysts.

A number of variables could be contributing to the shortage of behavior technicians in Florida including work arrangements, pay, job demand, and lack of training. Some researchers have quantitatively examined variables that contribute to behavior technician turnover and burnout across the United States and around the world (Novack & Dixon, 2019). For example, Gibson et al. (2009) sampled 81 behavior technicians who worked in ABA schools in Ireland. They found that perceived supervisor support was associated with lower burnout. Similarly, Hurt et al. (2013) found that perceived supervisor support predicted lower burnout among behavior technicians who worked in home-based services in the United States. Hurt et al. also found that extroversion was a protective factor against burnout, suggesting that some personal characteristics could be considered when selecting behavior technicians.

Relatedly, Kelly and Barnes-Holmes (2013) found that negative implicit attitudes toward individuals with ASD correlated with burnout, which could also be considered at the time of hire. Kazemi et al. (2015) found that job satisfaction was related to lower intention to leave the organization among behavior technicians in Southern California. They also found that perceived fairness of pay was related to intention to leave, while actual pay was not. Conversely, in a review of BHCOE® accredited companies, Cymbal et al. (2021) found lower wages were correlated with higher turnover, as well as lower caregiver satisfaction.

Jimenez-Gomez et al. (2021) surveyed the clinical behavior analysis workforce to assess the impact of the pandemic on behavior analysis survey providers. The results found that one-third of providers reported job insecurity and half reported an increase in burnout and a decrease in productivity. Newcomb et al. (2019) found that a competency-based badge system that culminated in a raise reduced behavior technician turnover, suggesting training and advancement might be important tools.

Taken together, these data suggest that considering job-employee fit, designing supportive work environments, strong supervision and training systems, and fair pay, may contribute to the recruitment and retention of behavior technicians. More research is needed to identify the variables that are contributing to a shortage of behavior therapists of all credentials and skill levels in the state of Florida. The aim of this project was to assess the shortage of behavior therapists and develop recommendations to improve access to quality behavioral services.

In the effort to assess the shortage, we established a multi-tier project. First, we established a collaborative task force including representation from multiple entities involved in behavior analytic care in our state including the Florida Association for Behavior Analysts (FABA), the Agency for Health Care Administration (AHCA), university representatives of behavior analysis academic training programs, agencies providing Registered Behavior Technician training and behavior analytic services, practicing behavior analysts and behavior therapists, and families. Second, we conducted research to assess the shortage. The research consisted of background literature and content reviews in the areas of need for service, legislative rules, policy, certification requirements, and the status of the shortage in the state. Third, to identify the level and areas in which the shortages are occurring, we conducted focus groups and interviews with providers at the Board-Certified Behavior Analyst (BCBA), Board-Certified Assistant Behavior Analyst (BCaBA), and Registered Behavior Technician (RBT) levels, disseminated surveys informed by the focus groups to providers at the BCBA and RBT levels and caregivers, and conducted interviews with university academic training programs. Finally, the data collected from all these individual studies were analyzed and we developed a set of recommendations to increase the number of qualified behavioral providers.

Our final report is organized into four major sections:

1. Environmental Scan: Provides an overview of factors contributing to service provision, including (a) eligibility, (b) Florida county distribution across CARD sites, (c) paths to service (i.e., funding and settings), (d) behavioral providers' credentials and availability, e) obtaining credentials, (f) general service availability, (g) specialized service unavailability, and (h) legal implications.

2. Focus Groups and Interviews: Describes the purpose, method, and results of group and individual interviews completed with RBTs, BCaBAs, BCBAs, and academic faculty.
3. Surveys: Describes the purpose, method, and results of surveys completed by RBTs, BCaBAs, BCBAs, and caregivers.
4. Conclusions and Recommendations: Synthesizes the outcomes of the environmental scan, focus groups and interviews, and surveys. Provides general and focused recommendations based on these outcomes and the current research team's action plan.

Parts 1-3 describe our approach to understanding the behavioral services shortage in Florida. Part 4 highlights our collective findings, recommendations, and action plan to chart a path forward.

Part 1: Environmental Scan

Given the dynamic and complex systems that impact both the supply of and demand for behavior therapists in Florida, we gathered information about factors impacting both potential service recipients (demand) and behavioral providers (supply) in Florida. In this section, we report a broad overview of potential service recipients, availability and status of behavioral service providers, systems related to accessing and delivering services, and systemic (e.g., legal) factors. When possible, we describe each of these factors in the context of the relevant funding stream supporting the services (i.e., Medicaid and insurance, Department of Education and school districts, and c) Agency for Persons with Disabilities). The data in this section were gathered via publicly available sources and direct requests to the named organizations in each section.

Part 1a: Overview of Individuals Eligible for Services in Florida

The Center for Autism and Related Disabilities (CARD) is a statewide technical assistance project funded by the Florida Legislature through the Florida Department of Education (DOE). CARD provides consultation and support to individuals diagnosed with ASD and other related disabilities (i.e., developmental delay, sensory impairment), their families, and providers. CARD programs are administered regionally via university-based centers.

The figures below show the number of registered constituents across grouped age categories a) in total across Florida and b) individually in each university-based CARD site. Broadly, the distribution of constituent age ranges was consistent across individual regions and total state numbers. The 5-15-year-old category has the highest number of registered constituents followed by the 22+ age range. Despite advances in early identification of ASD, the 0-2 and 3-4 age ranges had the lowest number of registered constituents across all regions, which is consistent with the finding that the median age of diagnosis in the United States is 5-years old (National Survey of Children's Health, 2016-2019).

Part 1b: Florida County Distribution Across CARD Sites

University of Central Florida (UCF) CARD: Brevard, Lake, Orange, Osceola, Seminole, Sumter, and Volusia.

University of Miami – Nova Southeastern University (UM-NSU) CARD: Miami-Dade, Broward, and Monroe.

University of South Florida (USF) CARD: Charlotte, Collier, DeSoto, Glades, Hardee, Hendry, Highlands, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk, and Sarasota.

University of Florida (UF) Gainesville CARD: Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Levy, Marion, Putnam, Suwannee, and Union.

UF-Jacksonville CARD: Baker, Clay, Duval, Flagler, Nassau, and St. Johns

Florida State University (FSU) CARD: Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Madison, Okaloosa, Santa Rosa, Taylor, Wakulla, Walton, and Washington.

Florida Atlantic University (FAU) CARD: Palm Beach, Martin, St. Lucie, Indian River, and Okeechobee

Figure 1-1

Total Number of CARD Clients Per Age Category Statewide as of June 30, 2023

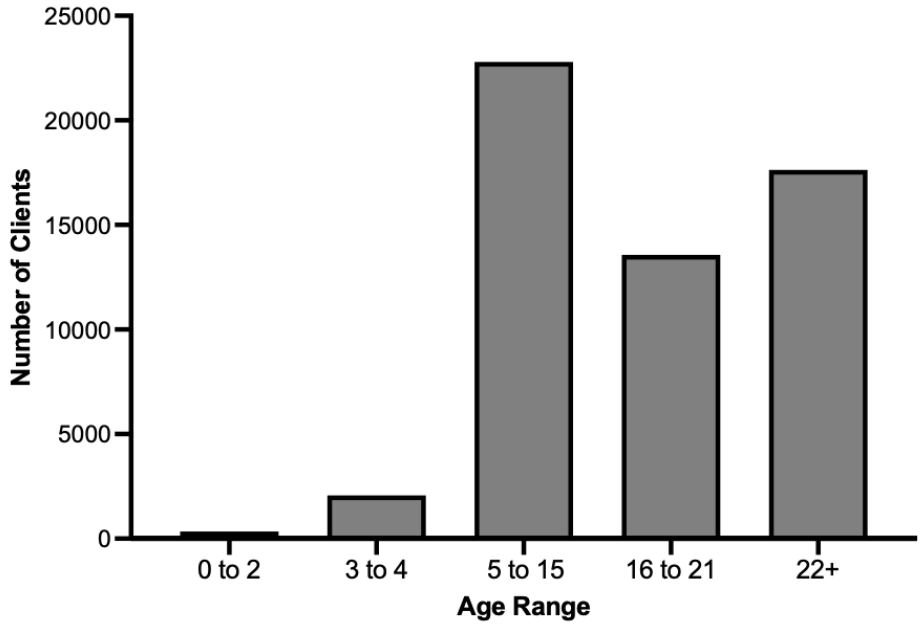
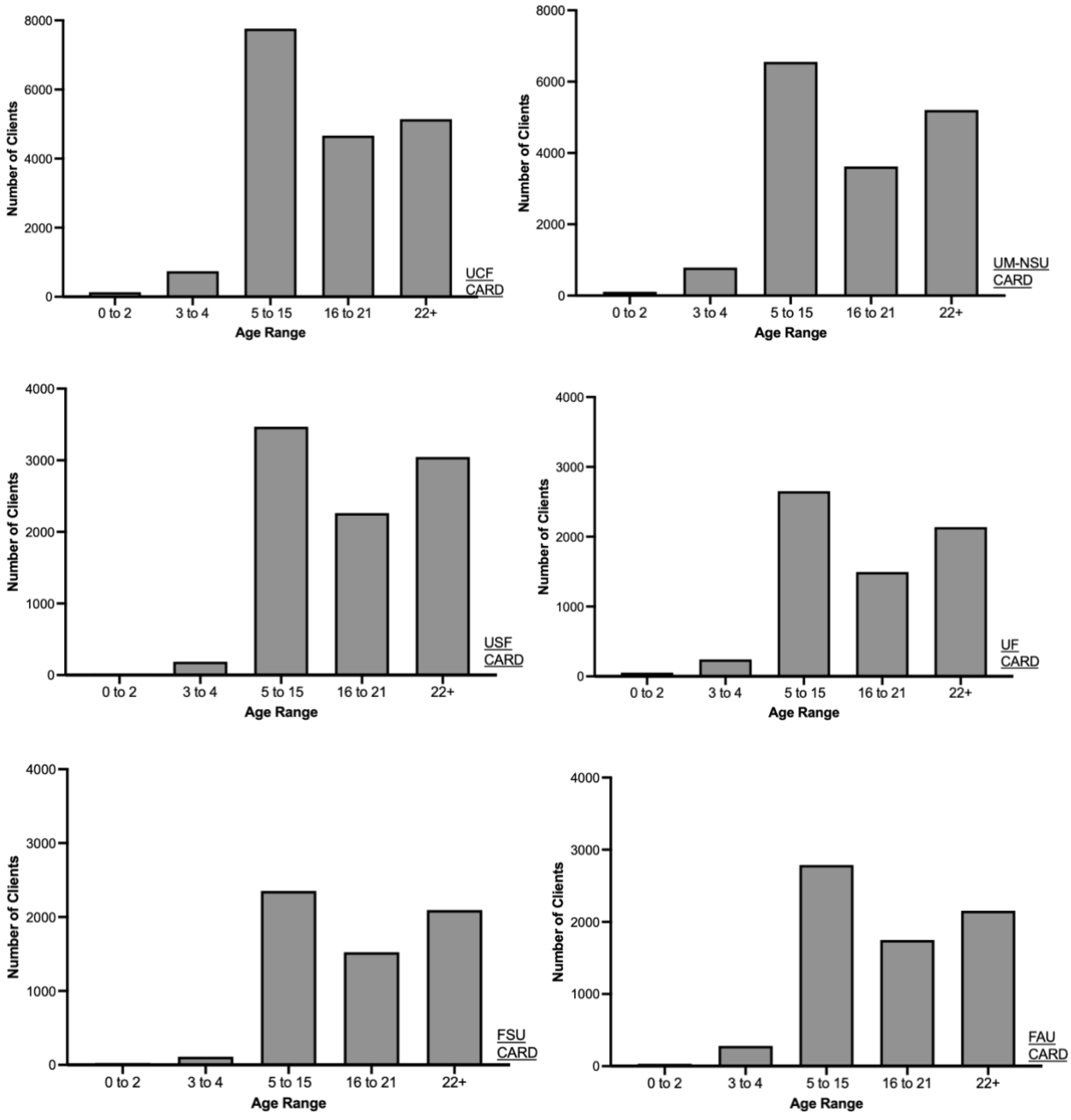
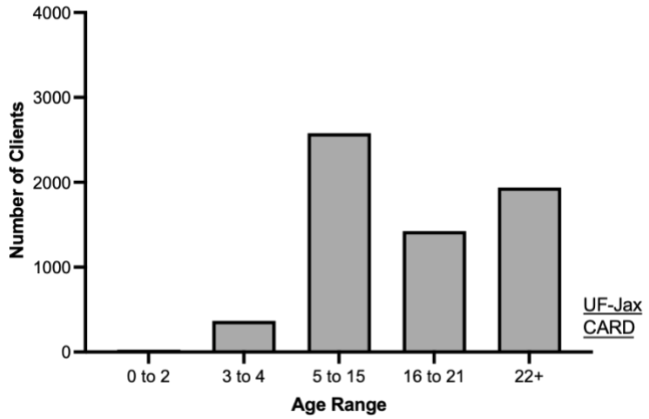


Figure 1-2

Total Number of CARD Clients in Individual University-based CARD Regional Centers Per Age Category Statewide as of June 30, 2023.





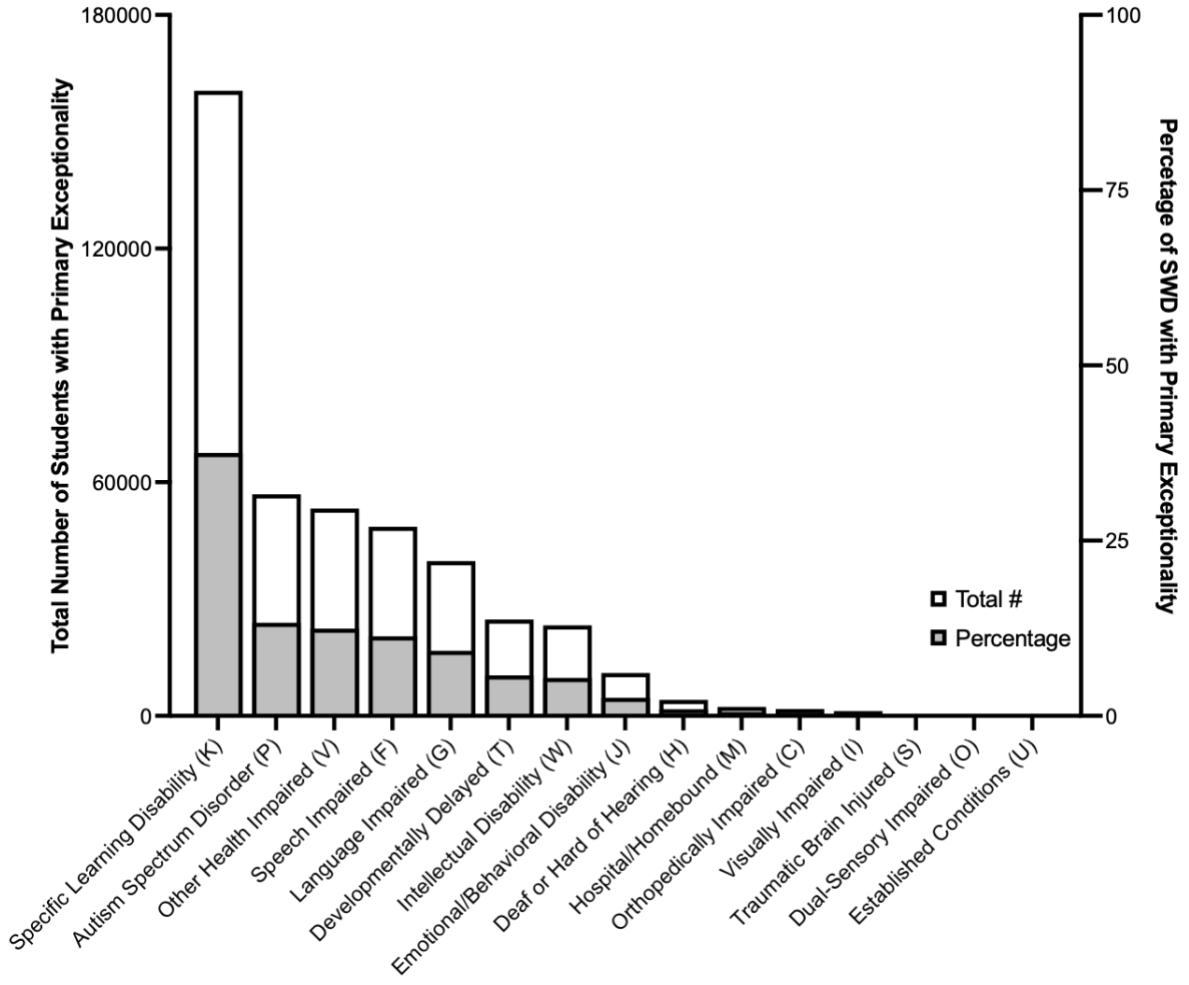
Students Listed With an Exceptionality via the Florida DOE

The Florida DOE monitors and provides school-based support to individuals with varying exceptionalities across the state via school-based services overseen by individual county-level districts. The Florida DOE reported that the three highest primary exceptionalities for the 2022-2023 school year were: a) specific learning disability (37.5%), b) ASD (13.3%), and other health impaired (12.4%).

As displayed in Figure 1-1, the total number of children between 5 and 15 years of age who are registered CARD constituents is approximately 22,500. However, as displayed in Figure 1-3, close to 60,000 students in the school system have ASD listed as their primary exceptionality. This highlights a potential disparity between the number of school-aged children who are registered with CARD and the number who may benefit from CARD resources. This also highlights a potential area of need for resources (i.e., school-based behavioral support).

Figure 1-3

Total and Percentage of Students With Disabilities (SWD) Listed by Primary Exceptionality During the 2022-2023 School Year



Note. Total number of students: 2,710,855.

Individuals receiving services from the Agency for Persons with Disabilities

During this funding period, we encountered barriers to identifying the shortage of BCBAs and behavior therapists related to the APD. Dr. Korinko, APD Agency Senior Behavior Analyst, is a member of the Task Force for this grant and has been working closely with the team to identify meaningful data as it relates to increasing quality access to behavioral services for adults and others in need of APD behavioral services. Long Range Program

Plans as well as Quarterly Fiscal reports are published by the Agency. These reports provide information regarding the number of APD constituents using each level of service. Table 1-1 is a snapshot of the number of individuals using Behavior Analysis waiver services from select months in 2022. Table 1-1

Clients Using Individual Waiver Services (iBudget) by Month of Service Payment

Service Description		Jul-22	Aug-22	Sep-22
Behavior Analysis- Level 1	BCBA or BCBA-D with more than 3 years of experience in the application of Behavior Analysis procedures post certification	752	733	628
Behavior Analysis- Level 2	BCBA with less than 3 years of experience in the application of Behavior Analysis procedures post certification	719	716	582
Behavior Analysis- Level 3	BCaBA or Florida Certified Behavior Analyst CBA	1,905	1,897	1,486
Behavior Analysis Assessment		27	52	43
Behavior Assistant Services (BAS)	BAS -- to provide support in implementing the plan created by the Behavior Analyst	32	41	40

Part 1c: Overview Path to Services

There are three general paths to access to services. These paths include insurance- or Medicaid- (AHCA) reimbursed ABA services as a medically necessary treatment, which is commonly used for minors and payment is based on the coverage policies of each of the insurance carriers. A school district may have the resources to provide behavioral supports in the school during the school day. If a student requires behavioral support to

access their education in the least restrictive setting, the school must provide those supports. There are services for persons with developmental disabilities provided through the iBudget Home- and Community-Based Services Medicaid Waiver operated by the Agency for Persons with Disabilities (APD), and these services often, but not exclusively, support adults and individuals who are in crisis.

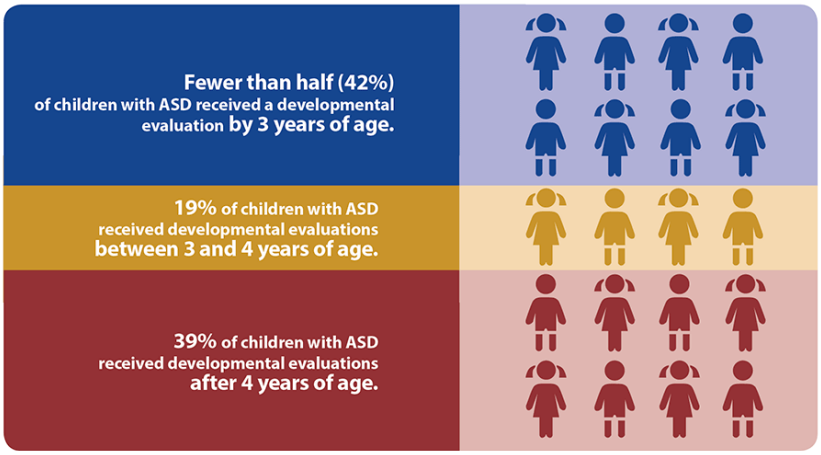
From a caregiver's perspective, the path to accessing needed services can be a confusing one and is met with barriers and waitlists. To access ABA services funded by Medicaid and most private insurances, the individual must have a comprehensive diagnostic evaluation completed by a qualified licensed practitioner. Similarly, to meet eligibility for APD services, an individual must meet the criteria of at least one Developmental Disability as defined in Florida Statutes. Assessment of intellectual functioning and adaptive skill level are necessary components of the criteria for Developmental Disability. According to the Behavior Analysis Services information from AHCA:

> The Comprehensive Diagnostic Evaluation (CDE) is the national practice standard necessary to diagnose autism as well as other developmental or behavioral disorders and indicates the most appropriate treatment(s) to address the child's needs. A multidisciplinary team or individual practitioner may perform a CDE to thoroughly review and assess the child's development and behavior. In either case, the CDE must be led by a licensed practitioner working within their scope of practice. The CDE must use evidence-based practice standards, methods and instruments, and the report must include assessment findings and treatment recommendations appropriate to the recipient (Comprehensive Diagnostic Evaluation Requirements).

We, in coordination with the Florida Association for Behavior Analysis (FABA), have collected information from diagnosticians across the state and the most common response is that the waitlist for a CDE is up to 18 months. There is currently (*September 5, 2023) a waiting list of 329 patients at the University of Florida Health Center for Autism and Neurodevelopment (UF Health CAN). UF CAN consists of multiple departments with approximately five providers who can administer a complete CDE. The waitlist at UF CAN equates to approximately 18 months to 2 years. Of the 329 patients on the waitlist, 55% are patients with Medicaid.

Given that there is an average 18-month waitlist for an evaluation and the primary care providers are expected to screen by the 24-month visit, it is not surprising that children are not getting connected to CARD until the 5-year-old age range. Connection to CARD may be a good indication of connection to service provision. However, this wait for an evaluation prevents early intervention as described by the CDC to young children (i.e., under the age of 3). Below is a graphic from the 2023 Community Report on ASD from the

CDC highlighting the large number of children who do not receive a CDE until after the age of 4.



Early Intervention

Early Steps is the state of Florida's early intervention program serving eligible children from birth to 36 months. Early Steps is meant to support families of young children and can be an avenue to access services before the CDE is completed. The state has 15 local Early Steps locations, and referrals to Early Steps can come from anyone, but often come from other providers, physicians, or school personnel. Following a referral, the program has a mandate to complete an intake within 5 days. The family is assigned a service coordinator, and then an assessment is conducted, resulting in an Individualized Family Support Plan (IFSP). This plan consists of a number of early intervention services to be initiated within 30 days. *Notably, Behavior Analysis services are not listed as a core Early Intervention service, and many of the Early Steps sites do not have BCBAs on staff or available by contract.* Thus, the waitlist for the CDE is even more impactful because there are few behavioral supports available during that time.

School-Based Behavioral Services

A child who has a disability (i.e., has a current individual educational plan [IEP]) and is age-eligible for VPK (i.e., age 4 by September 1) becomes eligible for specialized instructional services (SIS). BCBAs are listed as a category of certified provider approved by the DOE. House Bill 255 was enacted July 1, 2022. This bill included Registered Behavior Technicians (RBTs) in the definition of "Private Instructional Personnel" that are allowed to provide services in the Florida public schools.

Family or school personnel may advocate for the school district to provide behavioral services. In these situations, in accordance with the entitlement to a Free Appropriate Public Education (FAPE) and development of Individual Education Plans (IEPs) for students with disabilities, it may be the case that the team identifies access to behavioral services as a necessary related service and accommodation for the student to advance appropriately toward attaining their individual goals and be educated and participate alongside other students. This accommodation is made on an individual basis and is reported in the student's IEP.

The Florida DOE (2023) and Florida Department of Health (2023) websites provide helpful information on navigating the IEP process. The Disability Rights Florida webpage "Exceptional Student Education: Understand the Eligibility Process" (2023) provides a detailed account of the process and the child's rights when requesting an IEP. The process for an individual deemed eligible for services starts with a referral, then includes an assessment of general education interventions, an initial evaluation, a formal report, and typically ends with a meeting with the IEP team. If the school refuses to evaluate the child, the parent may challenge the decision by requesting a due process hearing. It is recommended that parents interact with the resources provided by the Department of Education, Department of Health, and Disability Rights Florida, the Protection and Advocacy organization for people with disabilities in Florida.

Agency for Persons With Disabilities

Individuals in the state of Florida over the age of 21 who are eligible for Medicaid may be eligible for the Florida Medicaid Developmental Disabilities Individual Budgeting (iBudget) Home- and Community-Based Services (HCBS) waiver through the Agency for Persons with Disabilities (APD), which provides home- and community-based supports and services. The iBudget Waiver program is funded by both federal and matching state dollars. An iBudget amount is determined for each individual after considering several factors according to the APD-approved assessment—the Questionnaire for Situational Information (QSI).

Part 1d: Behavioral Providers in Florida

Training and Credentialing Requirements

There are currently two organizations involved in overseeing training and credentialing standards for behavior analysis providers: The Behavior Analysis Certification Board (BACB) and the Association for Behavior Analysis, International (ABAI). Broadly, the BACB is involved in establishing practice standards and administering testing, while ABAI establishes and oversees educational and accreditation standards. Although other states have licensing requirements for behavior analysts, there is no state licensure for behavior analysts in Florida.

The Behavior Analysis Certification Board (BACB)

The BACB is a nonprofit 501(c)(3) corporation established to meet professional credentialing needs identified by behavior analysts, governments, and consumers of behavior analysis services. The BACB has established uniform content, standards, and criteria for the credentialing process that are designed to meet: a) legal standards established through state, national, and case law; b) accepted standards for certification programs; and c) best practice and ethical standards of the behavior analysis profession. *The BACB establishes practice standards, administers examinations, and provides ethics requirements and a disciplinary system for each of its certification programs. The BACB credentials and recognizes practitioners at four levels.*

Association for Behavior Analysis, International (ABAI)

ABAI is the primary membership organization for behavior analysis. ABAI plays a significant role in advancing the science and practice of behavior analysis and helps to ensure that behavior analysts have access to the latest research and resources in the field. It also contributes to the dissemination of evidence-based practices that can improve the lives of individuals across a wide range of domains.

Recently, oversight of educational requirements transferred from the BACB to ABAI. *The ABAI Accreditation Board reviews and approves university programs at the bachelor's, master's, and doctoral level, that offer coursework and training in behavior analysis. These programs are typically designed to help students meet the educational requirements for BCBA certification. The ABAI Accreditation Board evaluates program curricula, faculty qualifications, and other factors to ensure they meet the necessary standards* (see: here).

Part 1e: Obtaining Credentials

Registered Behavior Technician (RBT)

A Registered Behavior Technician (RBT) is a paraprofessional certified in behavior analysis. The requirements to apply for RBT certification are: a) minimum 18 years of age, b) high school degree or equivalent, c) pass criminal background and abuse registry check, d) complete 40 hours of qualified training, e) pass an RBT initial competency assessment, and f) pass the RBT certification exam.

40-hour Training. RBT applicants complete a 40-hour training that covers a) the RBT Task List, b) 3 hrs of training on the RBT ethics code, and 1-hr training on supervision requirements. Broadly, the training may be a combination of didactic (e.g., lecture), experiential (e.g., role-play), in person, and/or online instruction. Additionally, the training may be conducted in a single course or separated into briefer units.

Currently there are 34 training providers who offer the 40-hr training. Of these, four training providers are affiliated with a university training program. The other 30 training providers are independent agencies. Pass rates for training providers range from 18.5% to 100% for first time test takers. Pass rates for university-based training programs are all above 85% for first-time test takers. Data on the most recent first-time pass rates for RBTs sorted by providers are available here.

RBT Initial Competency Assessment. Following the 40-hr training, RBT applicants demonstrate they can proficiently perform job-critical tasks during a competency assessment under the supervision of a qualified assessor. The competency assessment must be completed following the 40-hr training and within 90 days before submitting an RBT certification application.

RBT Certification Exam. RBT applicants must pass the RBT certification exam. The exam is an 85-question multiple choice exam administered during a 90-min period. The exam includes questions in the following content areas: a) measurement, b) assessment, c) skill acquisition, d) behavior reduction, e) documentation and reporting, and f) professional conduct and scope of practice.

Note: RBTs are not independent practitioners and are required to receive supervision from a Board-Certified Behavior Analyst to maintain their credential.

Further information about the RBT credential can be found here.

Board Certified Assistant Behavior Analyst (BCaBA)

A Board-Certified Assistant Behavior Analyst (BCaBA) is an undergraduate-level certification in behavior analysis. Professionals certified at the BCaBA level provide behavior-analytic services under the supervision of a Board-Certified Behavior Analyst (BCBA). Professionals certified at the BCaBA level may not provide behavior-analytic services without the supervision of a BCBA. BCaBAs may supervise the work of Registered Behavior Technicians (RBTs). They may also function in the role of an RBT.

The requirements to apply for BCaBA certification include: a) bachelor's degree, b) completion of relevant behavior analytic coursework, d) practical supervised fieldwork in applied behavior analysis, and e) passing the BCaBA exam.

Coursework requirements. The BACB recognizes two pathways for obtaining the coursework requirements for BCaBA applicants: a) *Pathway 1*: ABAI-accredited undergraduate program and b): *Pathway 2*: Verified course sequence. The two pathways prescribe course content (described below). There is significant overlap between the content despite the different content structure and labels. One noteworthy difference

between the two pathways is the university-based supervised experiential learning requirement in Pathway 1.

Pathway 1: ABAI-accredited undergraduate program. Prospective applicants who complete coursework under Pathway 1 will complete 315 content hours of behavior analytic coursework according to the following content distribution.

Table 1-2

Pathway 1: ABAI Accredited Undergraduate Program Coursework

Content Areas	Hours
Principles of Behavior	45
Research Methods	45
Conceptual Analysis	45
Basic Behavior Analysis	45
Applied Behavior Analysis	45
Ethics	45
Supervised Experiential Learning	45
TOTAL	315

Currently there are two ABAI-accredited undergraduate programs and none in the state of Florida.

Pathway 2: Verified course sequence. Prospective applicants completing coursework under Pathway 2 will complete 225 content hours of behavior analytic coursework according to the following content distribution.

Table 1-3

Pathway 2: Verified Course Sequence

Content Areas	Hours
BACB Ethics Code and Code-Enforcement System; Professionalism	30
Philosophical Underpinnings; Concepts & Principles	45
Measurement, Data Display, and Interpretation; Experimental Design	30
Behavior Assessment	45
Behavior-Change Procedures; Selecting and Implementing Interventions	60
Personnel Supervision and Management	15
TOTAL	225

Currently there are eleven programs across seven universities in the state of Florida offering verified course sequences that meet the BCaBA coursework requirements.

Table 1-4

Programs in Florida Offering Verified Course Sequences for BCaBAs

University	Mode of Delivery
Albizu University	Online
Nova Southeastern University	On Campus and Online
Florida Institute of Technology	On Campus and Online
Florida International University	On Campus and Online
University of West Florida	Online

University of South Florida	On Campus and Online
Keiser University	On Campus

Experiential requirements. In addition to degree and coursework requirements, prospective BCaBA applicants must complete supervised fieldwork in applied behavior analysis. Trainees have the option to complete a) supervised fieldwork, or b) concentrated supervised fieldwork with a qualified supervisor. None of the programs listed above advertise providing supervision for experiential requirements at the undergraduate level.

Table 1-5

Supervised Fieldwork Requirements

	Supervised Fieldwork	Concentrated Supervised Fieldwork
Fieldwork hours required to qualify	1300	1000
Supervision hours per supervisory period	5%	10%

BCaBA Certification Exam. BCaBA applicants must pass the BCaBA certification exam. The exam contains 160 multiple choice questions administered during a 4-hour period. The exam includes questions in the following content areas: a) philosophical underpinnings; b) concepts and principles; c) measurement, data display, and interpretation; d) experimental design; e) ethics; f) behavior assessment; g) behavior-change procedures; h) selecting and implementing interventions; and i) personnel supervision and management.

Note: BCaBAs are not independent practitioners and are required to receive supervision from a Board-Certified Behavior Analyst to maintain their credential.

Board-Certified Behavior Analyst (BCBA)

The Board-Certified Behavior Analyst (BCBA) is a graduate-level certification in behavior analysis. Professionals certified at the BCBA level are independent practitioners who

provide behavior-analytic services. BCBAs may supervise the work of BCaBAs, RBTs, and other professionals who implement behavior-analytic interventions.

The requirements to apply for BCBA certification include: a) master's degree in behavior analysis, psychology, or a related field, b) completion of relevant behavior analytic coursework, d) practical supervised fieldwork in applied behavior analysis, and e) passing the BCBA exam.

Similar to the BCaBA pre-certification requirements, the BACB recognizes multiple pathways for obtaining the requisite didactic (i.e., coursework) and fieldwork experience necessary to sit for the BCBA exam.

Pathway 1: ABAI-accredited graduate program. Prospective applicants who complete coursework under Pathway 1 will complete 315 content hours of behavior analytic coursework according to the following content distribution.

Table 1-6

Pathway 1: ABAI Accredited Coursework

Content Areas	Hours
Principles of Behavior	45
Research Methods	45
Conceptual Analysis	45
Basic Behavior Analysis	45
Applied Behavior Analysis	45
Ethics	45
Supervised Experiential Learning	45
TOTAL	315

Currently there are 26 ABAI-accredited master's degree programs (total) and 3 in the state of Florida (i.e., Florida State University, Florida Institute of Technology, and University of South Florida).

Pathway 2: Verified course sequence. Prospective applicants who plan to fulfill the coursework requirements under Pathway 2 will complete 315 content hours of behavior analytic coursework according to the following content distribution.

Table 1-7

Pathway 2: Verified Course Sequence

Content Areas	Hours
BACB Ethics Code and Code-Enforcement System; Professionalism	45
Philosophical Underpinnings; Concepts & Principles	90
Measurement, Data Display, and Interpretation; Experimental Design	45
Behavior Assessment	45
Behavior-Change Procedures; Selecting and Implementing Interventions	60
Personnel Supervision and Management	30
TOTAL	315

Currently there are 11 universities in the state of Florida offering verified course sequences that meet the BCBA coursework requirements. Multiple universities offer more than one program format. Of these, five involve face-to-face instruction in brick-and-mortar programs, three offer hybrid or combination programs, and six offer online only degree programs. Additionally, one program offers a face-to-face VCS in the context of a doctoral program with no terminal master's option (University of Florida).

Table 1-8

Universities in Florida Offering Verified Course Sequences for BCBAs

University	Mode of Delivery
Florida Atlantic University	Online
University of Miami	On Campus
Nova Southeastern University	On Campus and Online
Florida Institute of Technology	On Campus, Hybrid, and Online
Florida International University	Hybrid and Online
University of West Florida	Online
University of Central Florida	Hybrid
Florida State University	On Campus
University of South Florida	On Campus and Online
Rollins University	On Campus
University of Florida*	On Campus

Pathway 3: Faculty teaching and research. Prospective applicants applying under Pathway 3 must have: a) three cumulative years of full-time work as a faculty member at a qualifying institution within a 5-year period and taught at least five sections of behavior-analytic coursework at the graduate level or b) published an empirical research article as first, second, or corresponding author in a high-quality behavior analytic journal.

Pathway 4: Post-doctoral experience. Prospective applicants who intend to apply under Pathway 4 must have: a) a doctoral degree from a qualifying institution and b) have completed at least 10 years of postdoctoral practical experience. The experiential requirements for those applying under Pathway 4 are different from those applying under Pathways 1-3 described below.

Of note, there are a number of upcoming changes to BCBA eligibility requirements, most notable that Pathway 1 will be the only eligibility pathway for BCBA certification starting January 1, 2032 (see Table 1-9).

Experiential requirements. In addition to degree and coursework requirements, prospective BCBA applicants must complete supervised fieldwork in applied behavior analysis. Trainees have the option to complete: a) supervised fieldwork, or b) concentrated supervised fieldwork with a qualified supervisor.

Table 1-9

Pathways to Obtaining BCBA Credential: Fieldwork & Supervision

Pathways 1, 2, and 3		
	Supervised Fieldwork	**Concentrated Supervised Fieldwork**
Fieldwork hours required to qualify	2,000	1,500
Supervision hours per supervisory period	5%	10%
Pathway 4		
Fieldwork hours required to qualify	500	-
Supervision hours per supervisory period	5%	-

BCBA Certification Exam. BCBA applicants must pass the BCBA certification exam. The exam contains 185 multiple choice questions administered during a 4-hour period. The exam includes questions in the following content areas: a) philosophical underpinnings; b) concepts and principles; c) measurement, data display, and interpretation; d) experimental design; e) ethics; f) behavior assessment; g) behavior-change procedures; h) selecting and implementing interventions; and i) personnel supervision and management.

BCBAs with doctoral training in behavior analysis may receive the designation of Board Certified Behavior Analyst- Doctoral (BCBA-D). The BCBA-D is not a separate certification, and it does not grant any privileges above or beyond BCBA certification. BCBA-Ds function in the same capacity as BCBAs are required to meet all BCBA maintenance requirements.

Continuing Education and Supervisor Training Requirements

After obtaining the relevant credential, providers certified at the assistant (BCaBA) and BCBA level must complete continuing education requirements on 2-year cycles (20 for BCaBA and 32 for BCBA) to maintain the credential. Of the required continuing education units, the BACB specifies that at minimum 3 units must be in the area of ethics each certification cycle. States with behavior analysis licensure may require additional continuing education units. Continuing education can be accessed via in person or video-streamed conferences, pre-recorded webinars, behavior analytic coursework, or reviewing/publishing in peer-reviewed journals. A recent survey of continuing education trends in behavior analysis reported that respondents obtained more than half of their continuing education units via virtual formats (Kranak et al., 2022).

BCBAs may function as supervisors in two capacities: a) as RBT and/or BCaBA supervisors and b) as trainee fieldwork supervisors (i.e., students obtaining supervised experience toward the BCBA credential). BCBAs who wish to function as supervisors in the latter category (i.e., fieldwork supervisor) must: a) be 1 year removed from initial certification and b) complete an 8-hour supervisor training prior to entering into a supervision relationship with a trainee.

Table 1-10

Total certificants in (a) United States and (b) Florida as of August 3, 2023

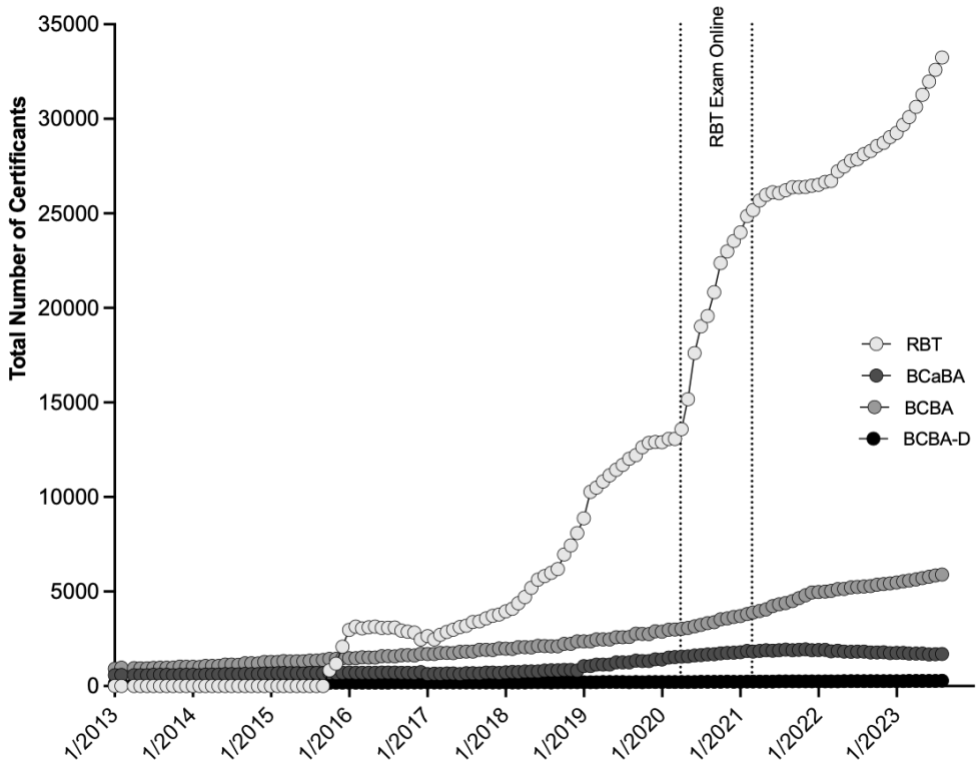
	BCBA-D	BCBA	BCaBA	RBT
United States:	2,611	55,469	4,185	146,319
Florida:	278	5,862	1,687	32,672
Percentage of Certificants:	10.6%	10.6%	40.3%	22.3%

Of note, there was a significant increase in the number of RBTs from April 2020 to December 2020 (i.e., 9,952 new RBTs; see Figure 1-4). This increase corresponds with reported exam theft and fraud that occurred when the BACB allowed RBT exams to be taken remotely during the Covid-19 lockdowns. It is believed that this large increase in certificants did not translate to an increase in qualified providers. The BACB removed this

remote exam option and pursued legal recourse against those identified in the exam theft and fraud. See this press release for details.

Figure 1-4

Trend in Number of Certificants at All Levels From January 2013 to August 2023



Certified providers across the state by county

In Table 1-11 we report the number of certified providers across the state of Florida broken down by county and summarized by region as they correspond to the CARD centers. The data are summarized in this way to allow a general comparison of providers and eligible recipients of services.

Counties that have been identified by the Federal Office of Rural Health Policy (FORHP) as rural areas eligible for Rural Health funding are denoted in bold in the table below. An asterisk identifies that the county is eligible even though it is designated as a Metropolitan County under an exception for outlying counties that do not have any urbanized area population. These data 1) show that there are higher numbers of providers across all

provider type in non-rural counties in the state, 2) even in counties that are rural and have RBTs, there are few, or in some cases, no BCBAs to supervise them (e.g., Liberty County).

Table 1-11

Certified Providers Across Counties and Regions

COUNTY/REGION	RBT	BCaBA	BCBA	BCBA-D
Bay	117	6	37	3
Calhoun	**7**	**2**	**2**	**0**
Escambia	156	4	67	3
Franklin	**1**	**0**	**0**	**0**
Gadsden	11	0	4	0
Holmes	**5**	**0**	**1**	**0**
Jackson	**16**	**0**	**6**	**0**
Jefferson*	**2**	**0**	**0**	**0**
Leon	259	11	73	12
Liberty	**7**	**0**	**0**	**0**
Madison	**1**	**0**	**1**	**0**
Okaloosa	221	15	84	1
Santa Rosa	122	9	75	1
Taylor	**0**	**0**	**1**	**0**
Wakulla*	**7**	**0**	**1**	**0**
Walton	58	5	19	1
Washington	7	0	4	0
REGION 1 (FSU-CARD)	997	52	375	21

Alachua	253	11	74	17
Bradford	**2**	**0**	**0**	**0**
Citrus	71	2	18	2
Columbia	**20**	**0**	**4**	**0**
Dixie	**4**	**0**	**1**	**0**
Gilchrist*	**0**	**0**	**1**	**0**
Hamilton	**5**	**0**	**0**	**0**
Hernando	156	9	28	1
Lafayette	**0**	**0**	**0**	**0**
Levy*	**8**	**0**	**1**	**0**
Marion	258	16	46	2
Putnam	**15**	**1**	**2**	**0**
Suwannee	**14**	**0**	**2**	**0**
Union	**4**	**0**	**1**	**0**
REGION 2 (UF GVL-CARD)	810	39	178	22
Baker	**7**	**0**	**1**	**0**
Clay	179	4	50	3
Duval	678	48	183	17
Flagler	131	8	22	0
Nassau*	**52**	**1**	**22**	**1**
St. Johns	142	15	104	5
REGION 3 (UF JCK-CARD)	1189	76	382	26
Brevard	592	49	237	23

Lake	337	14	90	2
Orange	1494	98	369	18
Osceola	496	25	58	2
Seminole	536	37	183	12
Sumter	26	0	2	0
Volusia	418	11	92	3
REGION 4 (UCF-CARD)	3899	234	1031	60
Charlotte	116	7	20	0
Collier	344	18	78	5
DeSoto	**10**	**0**	**1**	**0**
Glades	**0**	**0**	**0**	**0**
Hardee	**5**	**1**	**0**	**0**
Hendry	**18**	**0**	**0**	**0**
Highlands	45	1	4	1
Hillsborough	1476	96	430	29
Lee	1283	68	156	4
Manatee	187	6	69	3
Pasco	357	26	127	8
Pinellas	481	42	241	10
Polk	399	29	90	3
Sarasota	210	13	70	3
REGION 5 (USF-CARD)	4931	307	1286	66
Indian River	97	5	42	1

Martin	126	8	57	4
Okeechobee	**9**	**0**	**1**	**0**
Palm Beach	1845	66	332	17
St. Lucie	398	21	72	1
REGION 6 (FAU-CARD)	2475	100	504	23
Broward	2303	128	510	26
Dade	15957	746	1574	32
Monroe	**30**	**3**	**15**	**2**
REGION 7 (UM-NSU-CARD)	18290	877	2099	60

Part 1f: Snapshot of Available Services:

Providers enrolled with Florida Medicaid as Qualified Behavior Analysis Provider Type

The Agency for Health Care Administration (AHCA) is responsible for the administration of the Florida Medicaid program, licensure, and regulation of Florida's health facilities. As such, AHCA regulates Behavior Analysis services administered under Florida Medicaid. AHCA defines a "lead analyst" as a practitioner responsible for the implementation of Behavior Analysis services including: the completion and review of behavior assessments, reassessments, behavior plans, and behavior plan reviews. AHCA specifies that the following providers are eligible for Medicaid-reimbursable services: BCBAs, Florida Certified Behavior Analysts (F-CBAs), and providers licensed in the State of Florida under statues 490 (Psychological Services) or 491 (Clinical, Counseling, and Psychotherapy Services; to include Marriage and Family Therapy and Mental Health Counseling). The full Behavior Analysis Services Medicaid Coverage Policy can be viewed here.

AHCA credentials group providers who provide Behavior Analysis services in Florida across home and community settings. As of August 1, 2023, there were 1,228 group providers across 46 counties registered with Florida Medicaid. AHCA notes that although these providers are registered and eligible to provide Medicaid-reimbursable Behavior Analysis services, there is currently no mechanism to identify providers that are actively seeing or accepting Medicaid clients or patients.

Agency Data Analysis

We received data from three members of the Task Force who are in leadership positions in two large- and one medium-sized ABA agency in Florida. Two agencies provided de-identified data on variables related to staff retention at the RBT or Behavior Technician position. Agency 1, who operates several clinic-based centers across the north and central parts of the state reported an average duration of employment of 14 months. Agency 2, who provides clinic-based Behavior Analysis services across the southern part of the state reported 7.3 months average duration of employment for technicians.

Although there have been no direct studies to date examining the rate of RBT turnover, estimates reported across behavioral providers range from 30-75% yearly turnover rate with technicians estimated at the higher end (Molko, 2018). The high rate of RBT turnover is consistent with other direct care workers in other professions such as group home staff (Connor et al., 2003), home health-aides (Bergman et al., 2022), and other paraprofessionals (Ghere & York-Barr, 2007).

Behavioral Providers in the Public School System

In efforts to identify the status of behavioral support in the school districts, we reviewed the documented behavioral staff in each of the 68 school districts in Florida. First, we compiled a list of websites of the individual school districts using the map of Florida school districts provided by the Student Support Services Project. Next, we created a spreadsheet of the districts and separated the behavioral positions of staff by educational level (i.e., high school diploma, bachelor's degree, or master's degree). If we could not find any behavioral positions listed, we searched a) the human resources sections of the website and b) the directory available on the web pages using relevant keywords (e.g., "behavior," "registered," "analyst," "support staff," "ESE," and "paraprofessional"). This search was not intended to capture teachers, but instead the additional support that could be provided to the students. Additionally, our search might have missed professionals, such as teacher assistants, whose job description was not written with the aforementioned terminology.

We further separated the positions into subcategories to analyze if these positions were filled, and if not, how the districts were attempting to fill them. In the masters/bachelor category, we analyzed a) how many BCBAs were on staff, b) how many RBTs were on staff, c) how many bachelor's level behavior support professionals were on staff and d) how many job postings there were for each of these positions. In the high school diploma category, we analyzed a) how many RBTs were on staff, b) how many high-school level behavior support was on staff, and c) how many job postings there were for each of the positions.

Figure 1-5

Percentage of Florida School Districts With Behavioral Support Staff in Each of the Listed Subcategories

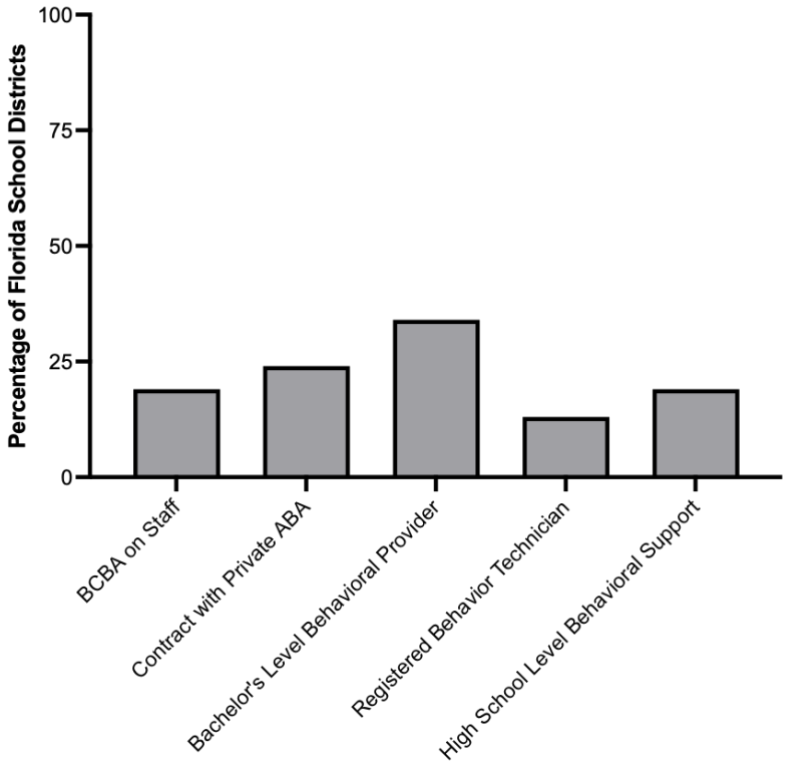
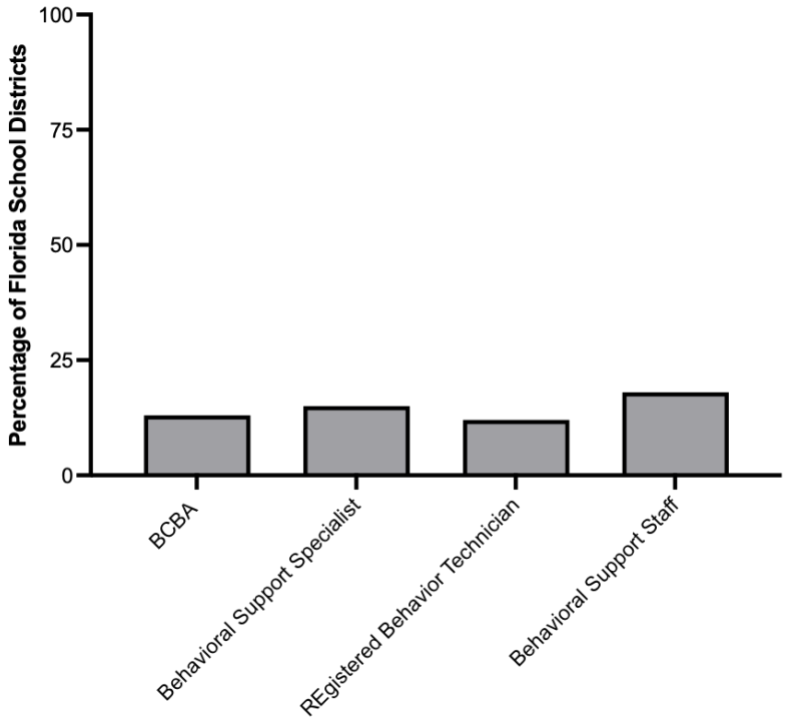


Figure 1-6

Percentage of Florida School Districts With Job Postings for Behavioral Support Staff in Each of the Listed Subcategories



Results show that a total of 16 out of the 68 total districts in Florida currently had BCBAs on staff. Of the 16 districts, the number of BCBAs working in each district was uncertain due to limited public information posted on each directory page. Only nine districts had job ads specifically for BCBAs. Out of the 68 school districts, 23 were staffing bachelor-level behavioral positions, including the following job titles: BCaBA and ESE Behavioral Coach. At least 4 school districts contracted outside behavioral services (e.g., Positive Behavior Supports, Corporation). Additionally, 11 districts had job ads for bachelor-level behavioral positions that were classified as "behavioral specialists."

Thirteen out of the 68 school districts currently had high school-level behavioral positions on staff, which included RBTs as well as ESE support staff. Nine school districts have RBTs with a BCBA currently on staff, which adheres to the BACB guidelines for RBT supervision. Eight school districts were currently hiring RBTs, and 12 school districts were hiring behavioral support staff without an RBT certification necessary for hire.

These data suggest there is a lack of behavioral support positions throughout the state of Florida across multiple levels of education. Most school districts did not provide any type of specialized behavioral support according to our criteria. Particularly, there is a distinct

lack of BCBAs and qualified behavioral specialists in most Florida school districts. There is also a lack of consistency in the amount of behavioral support provided across the districts throughout the state. For example, some districts staff multiple behavioral providers including BCBAs and RBTs (e.g., Escambia County). Whereas, it appears that other districts may not staff any specialized behavioral providers. These data were extracted from publicly posted information, therefore; it is possible that some districts do, in fact, hire behavioral providers as support staff but do not make this information publicly available. These data should be considered in light of the high number of school-aged children who are eligible for Behavior Analysis services (Figure 1-5 and Figure 1-6).

Providers in the APD System: Agency for Persons With Disabilities

During this contract period, we were unable to obtain exact numbers of providers or level of need for the agency, but we continue to work with Dr. Korinko on this specific area. To highlight the need for providers from a different angle, The Florida DD Waitlist Campaign, a program of the Florida Center for Inclusive Communities at the University of South Florida, has created a social media campaign with the aim of raising awareness of the extensive pre-enrollment for the iBudget services available. As of January 2023, the Campaign has reported 23,372 individuals on pre-enrollment. In addition, there are two agency-operated Developmental Disabilities Centers in the state, including Tacachale in Gainesville and Sunland in Marianna.

Part 1g: Specialized Services Are Lacking

Although there are services available through the insurance mandates, there is a lack of providers/sites available in the state of Florida that are uniquely qualified to serve high need, acute individuals (e.g., severe challenging behavior, pediatric feeding disorders) with various developmental and genetic diagnoses. There are a number of behavior analytic programs outside of Florida that may serve as exemplars for providing exceptional quality of care and training for both general and specialized services. There are no programs in the state of Florida that provide this level of services needed for specialized care. Here, we highlight several programs outside of Florida including the Kennedy Krieger Institute (KKI), the Munroe Meyer Institute (MMI), the Marcus Autism Center, the Rutgers Center for Adult Autism Services (RCAAS), and Upstate Golisano. Florida families seeking specialized services are often referred to these out-of-state programs.

Kennedy Krieger Institute (KKI)

The Behavioral Psychology Department at KKI is affiliated with Johns Hopkins University in Baltimore, Maryland and includes both inpatient and outpatient programs in assessment and treatment of severe challenging behavior and pediatric feeding disorders. The programs at KKI typically involve interprofessional collaboration between behavioral

professionals and researchers with other medical professionals (e.g., psychiatrists) to provide both comprehensive (e.g., language, communication, socialization, or educational skills) and specialized ABA interventions (e.g., treating severe aggression, self-injury, stereotypy, or PICA). KKI programs have served as a gold standard and model for specialized behavioral service provision, research, and training for decades.

Munroe Meyer Institute (MMI)

The ABA service programs at the Munroe Meyer Institute are affiliated with the University of Nebraska Medical Center located in Omaha, Nebraska. MMI's ABA programs are renowned for treating individuals with severe challenging behavior and pediatric feeding disorders. The severe behavior department conducts initial evaluations to determine a client's fit for their outpatient or day treatment program and also offers parent training to support caregivers in treatment generalization and maintenance. The pediatric feeding program includes an interdisciplinary team in the development of interventions to treat food selectivity and other feeding behaviors and serves as a training site for behavioral professionals.

Marcus Autism Center

The Marcus Autism Center is affiliated with The Emory University School of Medicine and Children's Healthcare of Atlanta located in Georgia. They provide services including ABA therapy, school consultation, severe behavior treatment, feeding treatment, and family support. Similar to the services at KKI and MMI, the behavior professionals at Marcus work collaboratively with an interdisciplinary team of medical professionals to maintain client safety and produce meaningful behavior change. The Marcus Autism Center also serves as a training site for behavioral professionals at various stages of training.

Rutgers Center for Adult Autism Services (RCAAS) and Rutgers University Center for Autism Research, Education, and Services (RUCARES)

Rutgers University in New Jersey has several specialized programs serving individuals with developmental disabilities across the lifespan. RCAAS is one of few programs dedicated to providing applied behavior analytic services to adults with ASD. Specifically, RCAAS offers the Supporting Community Access Through Leisure and Employment (SCALE) program, a college support program, psychological services, and an intensive outpatient clinic. Although the ABA program at Rutgers is relatively new compared to the aforementioned programs, it is being supported by some of the top behavior analytic researchers and practitioners in our field, many of whom previously helped establish the ABA programs at MMI.

Upstate Golisano

The Applied Behavior Analysis Program at Golisano Children's Hospital, affiliated with Upstate Medical University in New York, offers a variety of services including early intervention, pediatric feeding, and the treatment of severe behavior. Upstate Golisano also recently received $2.5 million in funding to establish a facility for children and adolescents with developmental disabilities who require longer term, inpatient care or are experiencing a mental health crisis.

These programs have several features in common. First, each program is affiliated with a university and/or medical hospital and can benefit from the resources available within those settings. Second, they work with interdisciplinary teams and frequently produce high-quality academic research. Finally, many of the best behavior analysis professionals (i.e., academics, researchers, and practitioners) currently located in Florida were trained at these out-of-state programs. Many of these programs were initiated with support from state funding or have supplemental support from the state for ongoing services.

Part 1h: Legal Implications

We reviewed a broad set of legal implications as they relate to behavioral services for individuals with autism and other diagnoses. Below is a snapshot as they relate to insurance- funded ABA services including Florida Medicaid, service availability in the school systems, APD, and comments on licensure. This is not meant to be an exhaustive list, rather a highlight in each of the areas of focus to demonstrate the activity around advocacy in the state.

Access to Insurance-Funded Applied Behavior Analysis: SB 2654

ASD insurance bill requiring coverage for ASD services such as diagnosis, ABA, and speech, occupational therapy, and physical therapy for individuals in the state of Florida, SB 2654, was enacted in 2008. The law became effective on April 1, 2009. Some notable caps are listed below:

- "'Eligible individual' means an individual under 18 years of age or an individual 18 years of age or older who is in high school who has been diagnosed as having a developmental disability at 8 years of age or younger."
- Coverage for the treatment of ASD is subject to a maximum annual benefit of $36,000 and a lifetime limit of $200,000.

Although there are noted caps in the Florida bill, The Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) is a federal law to prevent group health plans and health insurance issuers that

provide mental health or substance use disorder benefits from imposing limitations that are more restrictive than medical/surgical benefits. This law would include treatment limits like those described above (e.g., age and dollar caps).

ACHA/Medicaid-Funded ABA Services

Florida Medicaid, through AHCA, currently has a draft Behavior Analysis Services Policy that was proposed in March, 2022. There was a challenge filed by FABA to the policy on September 30, 2023 on the following grounds:

- Agency's calculation of estimated regulatory costs for providers (SERC);
- Definition & process for obtaining a comprehensive diagnostic evaluation (CDE);
- Necessity and interval period for conducting multiple assessments; and,
- Process for authorization requests for services to be delivered in schools.

As of August 18, 2023, the challenge to the rule is no longer in effect and the Agency will continue with the process to adopt the draft Policy. In addition, there was a hearing on September 13, 2023, regarding the codes and fee schedules proposed by Florida Medicaid. Some of the concerns presented are listed below:

- No Modifier for the procedure code 97153 so that when a BCBA-D or BCBA does direct care, they are still reimbursed at the rate of an RBT. This is important because there are some situations in which the BCBA should be doing the implementation, such as severe challenging behavior.
- Medicaid does not allow concurrent billing. Meaning that when an RBT is getting supervised on a case and there is protocol modification by the BCBA, Medicaid will not reimburse for both providers. This does not support increased high-quality supervision.
- The proposed rates do not match Medicaid services in other states or commercial payors in Florida, and do not support the cost of services, which may result in a smaller provider network for Medicaid.

Access to Behavior Analysis in Schools: HB-255

Another activity that has increased access to care is a new law that was enacted July 1, 2022, HB 255. This bill included Registered Behavior Technicians (RBTs) in the definition of "Private Instructional Personnel (PIP)." This allows RBTs to provide behavior analytic services for students in Florida's Public Schools, yet there have been problems with its implementation. FABA will also work with the Department of Education (DOE) to address other problems with RBT access. Per surveys of FABA members, there is also great variation in implementation, for example:

- Some school districts or schools use different procedures if the RBT works for an insurance company, APD, or direct payment from parent
- School districts and schools use different procedures for background screening, fingerprinting, vendor verification, badge/identification, liability insurance, and continuous escorting by school staff
- Some administrators limit access to times and locations when and where the behaviors of concern are not likely
- Some administrators delay or refuse access
- FABA is working to connect with the DOE to address these issues.
- There have been various companies who are engaging in unethical practices to gain access to schools to provide excessive amounts of services that would not be medically necessary. This has caused reluctancy from school districts to collaborate with any provider.
- Often times, the special education department is on board with PIPs in schools, but this is being controlled at the building principal level. As a result, it has been difficult to gain consistent procedures for access.

6A-6.03028 Provision of Free Appropriate Public Education (FAPE) and Development of Individual Educational Plans for Students with Disabilities

In accordance with the entitlement to Free Appropriate Public Education (FAPE) and development of Individual Education Plans (IEPs) for students with disabilities, it may be the case that the IEP team, including the caregivers, identifies access to behavioral services as necessary accommodation for the student to advance appropriately toward attaining their individual goals and be educated and participate alongside other students in the least restrictive setting possible. These accommodations are made on an individual basis and are reported in the student's IEP and can be funded by the school district.

Access to Behavior Analysis Services Through the Agency for Persons With Disabilities (Adults)

Florida providers historically have had access to provide waiver services; however, although there have been relatively recent rate increases, there are systemic barriers that have made this a less than appealing funding source and therefore has limited the number of practitioners providing services.

> Promulgation of a service delivery rule (65G-4) was mandated by the Legislature in section 393.13(4)(g)3., Florida Statues stating, "The agency shall adopt by rule a system for the oversight of behavioral programs. The system shall establish guidelines and procedures governing the design, approval, implementation, and monitoring of all behavioral

> programs involving clients. The system shall ensure statewide and local review by committees of professionals certified as behavior analysts pursuant to s. 393.17. No behavioral program shall be implemented unless reviewed according to the rules established by the agency under this section.

- There is reported (by both providers and caregivers) a lack of training for group home staff resulting in turnover and minimal progress made with adults receiving services.
- Providers report that there is an arduous process for plan approval through the Local Review Committees
- There is a lack of behavior analysis programs exposing future behavior analysts to the adult population

Licensure Issues

Currently, 37 states license behavior analysts in their own right (BACB, 2023). That is, these 37 states recognize behavior analysis as a distinct profession. Licensure across states has varied. The majority of states' licensure acts include both practice and title acts (all but two denoted by asterisks in Table 1-12). Thirteen of the 37 states established a behavior analysis licensing board to oversee regulatory requirements related to obtaining and maintaining state licensure. Seven states are regulated by the state Psychology board. There are six states that have adopted an omnibus licensing board that regulates multiple health professions. Two states included ABA regulation as part of another profession's licensing board. Finally, nine states did not establish a behavior analysis licensing board and did not incorporate regulatory requirements via other state boards. Regulatory oversight in these nine states is via the state department.

Table 1-12

Licensure Bodies Across States

Behavior Analyst Board	Psychology Board	Other Profession's Board	Omnibus Board	No board; state department has authority
Alabama	Arizona	Maryland	Indiana	Alaska
Georgia	Missouri	South Dakota	Iowa	Connecticut
Kentucky	Montana		Kansas	Hawaii
Louisiana	Ohio		Massachusetts	Illinois
Michigan	Tennessee		North Dakota	New York
Mississippi	Utah		Virginia	Texas
Nebraska	Wyoming			Vermont

Nevada	Washington
New Jersey	Wisconsin**
North Carolina	
Oklahoma	
Oregon**	
Rhode Island	

Behavior analysis is not a licensed profession in Florida. In 2022 FABA surveyed the membership. There were 130 respondents and of those, there is overwhelming support for licensure. FABA anticipates moving forward with this initiative beginning with efforts to educate the membership on licensure, the legislative process in general, and how to support legislative efforts.

Part 2: Focus Groups & Interviews

Rationale

The research team conducted three sets of focus groups with RBTs/behavior technicians, BCBAs/BCaBAs, and academics who train behavior analysts in Florida. The goal of each was to learn more about training available in Florida, current working conditions, and current challenges in clinical practice. The focus groups also informed the development of the subsequent surveys. Although quantitative research is limited to specific variables selected by the researchers, a qualitative approach could identify other factors not previously identified by researchers that could be important for reducing turnover and burnout (Burney et al., 2023). Therefore, we designed three focus group studies to gather information from stakeholders about their experiences providing behavior analytic services or training behavior analytic professionals. Because similar methodology was used for the RBT and BCBA/BCaBA focus groups, those are presented together, followed by academic interviews.

Method

Participants

We recruited participants through email and social media posts shared by the Florida Association of Behavior Analysis and the Center for Autism and Related Disabilities. To be included in the study, participants had to be working as a behavior therapist in Florida.

RBTs. Fourteen participants were interviewed (i.e, focus groups and individual meetings) based on availability. The research team only planned to conduct interviews in a small group format, but after scheduling the first two interviews, none of the RBTs who responded to the recruit emails attended the meetings. We then moved to scheduling individual interviews, which allowed for more flexibility in the scheduling. Data collection concluded once saturation had been reached (i.e., no new information was obtained from interviews or focus groups). Two participants reported working with individuals up to 15-years old. One participant reported working with children in foster care. See Table 2-1 for RBT participant demographics and work information.

Table 2-1

RBT Demographics & Work Information

Variable	*n*	%
Demographics		
Gender		

Woman	11	78.6
Not reported	3	21.4
Race/Ethnicity		
White, Non-Hispanic	4	28.6
White, Hispanic	3	21.4
Latin American	1	7.1
Asian	1	7.1
Not reported	3	21.4
Education		
High School Diploma	5	35.7
2 Years of College or more	7	50
Master's degree (or other post-graduate training)	1	7.1
Work Information		
Work Location		
Central Florida	9	64.3
South Florida	3	21.4
Northeast Florida	2	14.3
Work setting		
In-Home	1	7.1
Clinic	7	50
Clinic, university-affiliated	3	21.4
Home, School, and Clinic	5	35.7
Not reported	1	7.1
Pay		
Hourly	13	92.9
Salary	1	7.1
Years Worked as RBT		
Less than 1 year	2	14.3
greater than 1 year	12	85.7

BCaBas and BCBAs. A total of 24 BCBAs and one BCaBA were interviewed in small groups. Their experience ranged from 1 to 40 years as a behavior analyst. See Table 2-2 for BCaBA and BCBA participant demographics and work information.

Table 2-2

BCaBA and BCBA Demographics and Work Information

Variable	*n*	%
Demographics		
Gender		
Woman	20	83.3
Man	4	16.7
Race/Ethnicity		
White, Non-Hispanic	13	54.2
White, Hispanic	4	16.7
White, Irish	1	4.2
White, Greek	1	4.2
White, Western European	1	4.2
Not reported	5	20.8
Work Information		
Work with adults		
Yes, between ages 22-26	13	54.2
No	11	45.8
Work Location		
Central Florida	10	38.5
Northeast Florida	4	15.4
Northwest Florida	1	3.9
South Florida	7	26.9
Southwest Florida	4	15.4
Work Setting		
Clinic	12	20.3
In-Home	19	32.2
School and community	17	28.8
Residential Hospital/Inpatient	1	1.7
University affiliated	5	8.5
Other	5	8.5

Interview Format

Semi-structured interviews were conducted via Zoom and included a researcher and an undergraduate research assistant. The interview questions were developed by the research team based on previous research on causes of employee and behavior

technician burnout and turnover as well as concerns in the field. Participants were instructed to use a pseudonym and were allowed to keep their camera off to preserve anonymity. The Zoom meetings were recorded and lasted approximately 30 and 120 minutes for individual interviews and small group interviews, respectively. Throughout the RBT Results section, the individual interviews and focus groups will be referred to as interview(s). Interviews were conducted for the RBTs due to difficulties with recruitment. Since we only conducted small group interviews with the BCBAs, those interviews will be referred to as focus groups. Interview questions are available in Appendix A.

Coding Process

After an interview was complete, a transcription of the interview was created. We used a thematic analysis to look for themes across participant responses and pulled quotes that highlighted each theme.

RBT Results

The results of the interviews indicated three major themes including insufficient training, poor supervision quality, and dissatisfaction with pay and workplace conditions (See Table 2-3 for codebook). These results will be further described below.

Table 2-3

RBT Codebook

Theme	Definition
Insufficient Training	Participants discussed issues related to training to become an RBT, ongoing training, and current resources.
Poor Supervision Quality	Participants discussed the quality of the supervision they received at work.
Dissatisfaction with Pay and Workplace Conditions	Participants discussed being dissatisfied with pay, workplace cleanliness, or facility procedures.

Insufficient Training

Participants were asked questions relevant to training specifically asked for information regarding onboarding to become an RBT, ongoing training, and current resources. Following these questions, complaints regarding the quality of initial training and insufficient training to manage and mitigate challenging behavior were raised within each interview. Strengths mentioned were the flexibility of scheduling, the sense of community, and contributing to the growth of their clients.

Regarding onboarding, the RBT's experiences varied. All RBTs reported completing the required 40 hr training, but the formats varied (i.e., online or delivered by a BCBA). Following the required training, the RBTs were provided with in vivo training, often referred to as shadowing, where they were paired with an experienced RBT to learn how to program for specific clients. Most of the RBTs described insufficient or varying quality of training from the RBTs and BCBAs. When describing their training, one RBT stated,

> They just gave me the 40-hour training video and said watch this and then had me shadow for like 2 days and then kind of it was like here you go and then I only get my 5% supervision.

Another RBT described a similar experience where all their initial training was through Zoom, and then they were scheduled to provide services in-home without receiving any hands-on training on how to provide behavior analytic therapy. Only one RBT, who works at a university-affiliated clinic, could describe competencies required by the company greater than those required by the BACB.

The RBTs highlighted the benefits of working with trainers who explained, modeled, allowed an opportunity for the trainee to rehearse, then provided feedback on how to follow the session protocols. One RBT stated,

> In vivo exposure is not enough. The actual like hands-on experience aspect of it is I believe in my personal opinion actually just needs more time to be practiced and flushed out because. Modeling and feedback and instruction like doing, doing BST, and whatever have you can only go so far until like the individual actually gets comfortable doing it. Now I would say that with the understanding that they're not going to be perfect even with more hands-on training time or what not, but exposing them to different clients and different settings and different programs will help.

In this excerpt, the RBT discusses behavioral skills training (BST), an instructional procedure involving instruction, modeling, rehearsal, and feedback. A few RBTs stated

they received their initial training with "easy" clients, but then were switched to clients with challenging behavior and felt under-prepared to work with them.

A lack of sufficient training on challenging behavior (e.g., aggression, disruptions, and self-injurious behavior) was mentioned at least 13 times across the interviews. Within one small group interview, this point was brought forward or agreed upon by every subject matter expert in attendance. Each RBT stated they were required to physically manage challenging behaviors, some without any training on how to do so, which they stated led to burnout. When asked what additional training could be beneficial one RBT said,

> [I'd like] more training on how to manage [challenging] behavior because I think a lot of the time when [challenging] behavior really takes a toll on RBTs it's when we're not receiving adequate training on how to manage those specific behaviors.

Although some RBTs stated receiving crisis management training during their onboarding would have been helpful, they also stated the procedures did not always cover the behaviors they needed help to manage. Two RBTs recounted their experience with Crisis Prevention Inventions (CPI):

> There were quite a few children who had serious [challenging] behaviors that I don't feel like were covered in training at all and that my center specifically had actually asked for additional training on these types of [challenging] behaviors. They said that they had resolved the issue and gave us CPI training for these things but the CPI training didn't actually cover any of the aggressive behaviors that we aren't trained to deal with at the center.

The other RBT stated:

> The same issue definitely [applies] with the CPI training. The issue is that we were having children who were breaking windows and we did not feel properly trained to deal with [it], and when we brought this to management they said okay, well, we'll give you training to deal with this, for now, just try to block the windows…The training that they gave to deal with it was a nonviolent verbal intervention so it didn't feel like what we needed was covered.

RBTs rarely stated their company provided consistent, ongoing training opportunities, apart from a clinic associated with a university. The RBTs suggested that further training on how to provide feedback to peers and natural environment training would be helpful. Insufficient training on electronic data collection systems was also discussed in two of the interviews. In addition, one RBT mentioned a lack of trauma-informed training.

Overall, based on the responses regarding initial training, preliminary recommendations are that RBTs experience more rigorous onboard training with specific competencies for skill acquisition, challenging behavior management, and data collection relevant to the clients they will teach. It is also important that training takes place in naturalistic setting(s) (e.g., school, home, or clinic). These findings also suggest it would be beneficial to improve training for BCBAs in developing and training staff on behavior plans.

Poor Supervision Quality

The second theme that arose during the interviews was the quality of supervision. Across all interviews the RBTs stated that poor quality of supervision contributed to their frustrations at work. Between not receiving consistent supervision, saying they,

> Don't receive like consistent feedback like supervision like it's it's not weekly it's not like throughout different parts of the day so it's kind of like an hour and a half hour and a half roughly at the same time every other week

or

> The quality of supervision received is not equal with all of the supervisors so some of us have great experiences and get a lot of feedback and feel like like we're supported and we're able to learn through that, I have coworkers that don't have that same opinion.

Additionally, an RBT stated the quality of supervision for in-home services was significantly lower.

> I feel like the quality that I had working in home wasn't as good as the quality that I have working in the center. In home I didn't feel like I was ever getting feedback as far as like oh you need to do this better or um just it was always they were just always telling me I was doing everything right and I feel like I could there's always room for improvement but within the center I feel like I'm always getting feedback and I'm always being you know told how to do things and I feel it better.

On several occasions the RBTs stated not receiving constructive feedback was a source of frustration.

Based on information provided from the RBTs on their supervision experience, preliminary recommendations are that BCBAs should undergo further training on providing supervision, especially for delivering feedback and ongoing training. They might

also benefit from adding structure to supervision so that they can track and monitor supervisee progress.

Dissatisfaction With Pay and Workplace Conditions

The third theme that emerged during interviews is related to pay and workplace conditions. Across the majority of interviews, RBTs expressed some dissatisfaction with pay. While one RBT hypothesized that the pay might be initially attractive for recent high school graduates, it was a detractor for more experienced RBTs. The RBTs made comments such as, "*I would not say that people come into this position for the pay,*" and "*I think my center kind of gets away with the very poor pay because they're a very well-known and highly regarded center that provides graduate training,*" and " *At my old job [the pay structure] was low by the standards of the area. So, at the first clinic, I think I started with, I want to say $14.00 an hour.*"

The overall agreement was that the pay was not sufficient for the job tasks (e.g., managing challenging behavior, cleaning up bowel movement accidents and bodily fluids).

In one small group interview, all three RBTs mentioned that they experienced or heard that the pay for working in-home was higher. This was attributed to the fact that insurance does not reimburse mileage and so the companies provided higher pay to offset it. Two interviews (including four RBTs) mentioned that "*they [companies] have us like do work off the clock*" to complete session notes if they could not finish them during the session time with the client present. Lastly, while all interviews mentioned that the scheduling structure was a positive feature of the job, it was frequently brought up that when a client cancels their appointment, their hours are reduced, and this leads to a reduction in pay. Many of the RBTs described the position as a temporary position that was well suited to get experience before seeking higher education or a more desired job.

A shortage of RBTs was acknowledged during all interviews. It was stated that this shortage has decreased workplace satisfaction and culture. Three of the RBTs (currently non-board seeking) mentioned they were already planning to leave their RBT positions.

> **RBT 1:** I do want to go into the field of talk therapy I have a bachelors in psychology so I'm trying to now get my masters in counseling so for me I do not plan to continue to grow as an RBT even though I've really enjoyed it
>
> **RBT 2**: I plan on opening my own daycare so no I don't plan on being an RBT
>
> **RBT 3:** I also considered you know staying in this field and working up, as I wanna continue working in behavior but I don't really wanna stay in RBT

> for much more than maybe another year simply because of the experience I've already had.

A few recommendations that emerged from these discussions might be to structure RBT jobs so that they can receive consistent pay regardless of client cancellations. Small and medium-sized businesses might need business consultation to support designing work structures that are likely to result in profitability for the company while aiding in employee retention and satisfaction. Further, businesses could examine other low-cost avenues for improving the work culture and making employees feel valued.

RBTs also discussed safety and preparedness procedures. Cleanliness of the clinic facilities were mentioned across the interviews. In one interview the RBT stated, *"[the cleanliness of the center] actually affect[s] our work with the clients*" and that "*the cleanliness of the center being so awful our kids end up getting sick, our RBTs end up getting sick more, diseases spread throughout the center, and I'm embarrassed completely.*" This sentiment was reiterated throughout the interviews.

In a later interview, the participants expanded on the current facility procedures, which expanded on the lack of cleaning procedures that included safety drills related to active shooters, fires, tornados, and health checks.

BCBA Results

The results of the focus groups indicated three major themes contributing to higher rates of RBT turnover according to BCBAs including a lack of quality and consistent supervision, barriers to providing services to challenging populations, inability to provide acceptable pay rates due to outside variables, and experiencing difficulties related to insurance (See Table 2-4 for Codebook).

Table 2-4

BCBA Codebook

Theme	Definition
A Lack of Quality and Consistent Supervision	Participants discussed the different barriers they encountered in implementing high quality supervision.

Barriers to Providing Services to Challenging Populations	Participants discussed barriers to providing consistent services to individuals who engaged in challenging behavior and/or adults.
Inability to Provide Acceptable Pay Rates	Participants discussed how pay or job task-related variables impacted RBT burnout and turnover.
Difficulties with Insurance	Participants specifically discussed insurance as it relates to pay or regulation.

A Lack of Quality and Consistent Supervision

Most BCBAs reported experiencing barriers to providing consistent and quality supervision. They stated that their challenges in providing quality supervision contributed to high turnover and low-quality services. For example, one participant stated, "*we lose them, and potentially somebody who could do good and want to pursue this field because of the lack of supervision.*"

Participants reported that there is not standardized supervision for BCBAs across the field. Specifically, participants suggested that many BCBAs lacked the qualifications and competency to be good supervisors. Participants also reported that they felt unprepared to supervise and did not receive quality training on how to provide supervision. One BCBA lamented: "*I feel like I've become a good supervisor over the years, but I was definitely not qualified in any capacity whatsoever to do supervision when I was a year out of grad school*." A participant in the group agreed saying, "*Yes, the RBTs need training, but they're getting training from BCBAs that are not getting proper training in practical experience and supervision themselves.*"

All focus groups described how BCBAs go straight from an RBT position to a BCBA position, and sufficient training is not provided in graduate school to train staff. All participants agreed that a lack of supervision expertise negatively impacts training and results in inadequate training. This inadequate training and support can lead to turnover within a company or individuals leaving the field altogether. It is recommended that a formal training on supervision be created for graduate students and current BCBAs to help shape their supervisory skills.

Barriers to Providing Services to Challenging Populations

Participants frequently reported experiencing barriers to providing services for populations including adults and individuals who engage in challenging behavior. Specifically, de-escalating physical aggression requires specialized training, and if an RBT is not provided with that training, this could lead to burnout and safety risks.

For example, one participant stated,

> Adults with developmental disabilities can be very physically aggressive, so especially because they probably didn't have very good service when they were young...I would say anyone over 40, you can assume had very little, you know, help as a child, so you can understand how behaviors will have developed over time and become ingrained and are then really difficult to change. But these people who are coming from other fields just looking for you know that $18 to $22 would be a big step up for some of those [certified nurse assistants], but then they don't stay because it's just too challenging.

When comparing the job tasks of working with adults to working with children, participants expressed how the difference in safety could affect how RBTs chose the populations they work with:

> Whether you're working with a 3-year-old, or whether you're working with a 22-year-old in diapers, who is you know, being aggressive toward you. Why wouldn't you want the little 3-year-old, who can barely hurt you, and is much easier to maintain?

Most participants agreed that working with adults can be more challenging than working with children. It should be noted that individuals who acquired their experience before 2010 often stated they had experience working within group homes, but most had transitioned to other populations. Individuals who acquired their experience in the last 5 years often reported only working with children and adolescents. Therefore, it seems less likely that graduate students are acquiring their hours within residential facilities or completing their credentials and working in those environments. While the daily tasks of working with adults cannot be changed, safety can be increased. It is recommended to evaluate how safety can be increased in group homes for the clients and staff. Also, it is recommended that universities work with residential facilities to create quality practicum experiences. This will not only increase the workforce in group homes, but also increase the number of BCBAs that are taking these positions.

Similar to working with adults, BCBAs frequently reported that the response effort and safety risks of working with children who engaged in destructive behavior (e.g., aggression

or self-injurious behavior) often related to burnout and turnover with RBTs. For example, one participant stated, "*the first time they get bit or so, the first time they get hit or their hair gets pulled, then they're like I'm out*." It was suggested that additional resources were needed to support staff working in those roles. Specifically, participants recommended that RBTs receive counseling, extra training, and supervision outside of direct care sessions. Another participant shared,

> They are, you know, thrown in with a client in home. Don't know what to do, so they can't get in touch with their supervisor. Their supervisor is not helping them, and they're getting beat up, and whatever else the thing is, and they're like, this is not some I'm out, you know, and not only do we lose them, and potentially somebody who could do good and want to pursue this field.

These responses suggest training is needed at the BCBA level to program and supervise cases with destructive behavior. At the RBT level, additional support can be provided such as mental health services, crisis management, and ongoing training.

Inability to Provide Acceptable Pay Rates

Behavior analysts frequently brought up pay as a factor for turnover. The BCBAs' responses were consistent with the RBTs' regarding inconsistent schedules, low pay compared to job tasks (specifically with challenging behavior), and unpaid job tasks. For example, one BCBA said,

> It is a little bit more difficult to make sure people are, you know, putting in that extra effort in the extra time, and you know, doing, you know, 3 h worth of graphs, and only getting to get reimbursed for an hour of your time.

Oftentimes, the company financially takes the hit for providing the supervision and training needed to adequately support staff and this can affect how much they can pay staff. In one example a BCBA described their experience with companies offering higher hourly wages,

> It is a little bit more difficult to make sure people are, you know, putting in that extra effort in the extra time, and you know, doing, you know, 3 h worth of graphs, and only getting to get reimbursed for an hour of your time.

Insurance

The stressors described by the behavior analysts regarding insurance most often referenced pay for services, but on one occasion mentioned regulation. In the following example, a BCBA describes how Medicaid not allowing concurrent billing has impacted their company, "*Medicaid and others don't pay for supervision. So, it's a tremendous cost at the end of the year. Every time we're doing our budget like Wow! That's how much money we ate*."

In regard to regulation, this BCBA describes not being able to provide services across necessary environments due to requirements that are not related to their client:

> Another barrier I thought of that we've encountered is we used to do a lot more services within the school setting but now, with the law or the statute that went into effect with the agency needing to be a Medicaid provider we are able to do that in public schools because we don't serve Medicaid clients.

These results suggest there are a multitude of variables impacting RBT burnout, turnover, and quality, and several barriers to BCBAs providing high quality services.

Academic Interviews

Florida offers several strong behavior analysis undergraduate and graduate training programs. We conducted one-on-one interviews with academics from a number of institutions across Florida including Florida Institute of Technology, Florida International University, University of Florida, Florida State University, University of South Florida, Rollins University, and University of Miami. Three of these institutions also have online and/or hybrid programs. We created a list of standard questions regarding their training program, practicum experiences and sites, student population, research, and barriers to training. When applicable, we asked follow-up questions. We have categorized and summarized the findings below while taking steps to avoid identifying individual faculty or programs (see Table 2-5 for Codebook).

Table 2-5

Academics Themes

Theme	Definition

Concerns and Opportunities in Undergraduate Training	Limited opportunities to gather experience hours and obtain supervision, especially with diverse populations; limited bachelor-level jobs available
Graduate Training Practicum Experience	High variation in experiential training practices across universities; limited opportunities to gain experience with diverse population
Classes Outside of VCS	Little opportunity to take coursework related to diverse populations or practical topics
Practicum Sites	High variability across universities related to vetting and interacting with practicum sites; Some sites offer narrow opportunities to build skills
Master's Thesis/Capstone	The extent to which theses/capstones were clinically relevant and consistent with professional goals

Training Programs

Table 2-6 shows the ten most frequently attended training programs (graduate school or certificate program) by the most recent 1870 BCBAs in Florida (from June 2021 to August 2023). Thirteen of the 15 programs were either fully online or included online components. A complete list is included in Appendix .

Table 2-6

Most Frequently Attended BCBA Training Programs in Florida

Institution	Number of Certificants	Percentage of Certificants	Average Pass Rate (last 3 years)
Florida Institute of Technology (Campus, hybrid, online* certificate)	360	18.89%	95%, 87%, 75%
ABA España*	343	17.66%	41%
University of West Florida*	220	11.61%	60%
Ball State University*	157	8.40%	63%
University of South Florida (Campus, online*)	148	7.70%	78%, 68%

Arizona State University*	107	5.72%	54%
Capella University*	92	4.92%	45%
Nova Southeastern University*	47	2.46%	51%
Multiple Programs	42	2.25%	N/A
Purdue Global University*	41	2.19%	40%
Florida State University	34	1.82%	98%
University of Cincinnati*	26	1.39%	55%
Florida International University**	22	1.18%	N/A
Rollins College	21	1.12%	80%
Chicago School of Professional Psychology*	16	0.86%	47%

Table 2-7

Certificants Who Attended Florida-Based Institutions (Degree or Certificate Programs)

Institution	Number of Certificants	Percentage of Certificants	Average Pass Rate (last 3 years)
Florida Institute of Technology (Campus, hybrid, online certificate)	360	18.89%	95%, 87%, 75%
University of West Florida*	220	11.61%	60%
University of South Florida (Campus, online)	148	7.70%	78%, 68%
Nova Southeastern University*	47	2.46%	51%
Florida State University	34	1.82%	98%
Florida International University*	22	1.18%	N/A
Rollins College	21	1.12%	80%
University of North Florida*	16	0.86%	78%
University of Miami	10	0.5%	85%
Florida Atlantic University	4	0.2%	86%
University of Central Florida	2	0.1%	66%

Note. *Online programs denoted with one asterisk. **The BACB does not report pass rates for programs that have less than six test-takers in one calendar year. Programs that reported a pass rate for 2 of the last 3 years are denoted with two asterisks. University of North Florida no longer offers a graduate-level behavior analysis training program.

Concerns and Opportunities in Undergraduate Training

All of the programs offered undergraduate coursework or an undergraduate course sequence that leads to a BCaBA. However, there were limited opportunities for undergraduate students to gain practicum experience leading to BCaBA certification through their academic training program. This can lead to students acquiring experience

hours after graduation and taking the certification exam months or years after their coursework and can affect pass rates. Some programs also noted that a subset of undergraduate students leave the state after graduation to gain experience in specific areas like challenging behavior and feeding. There was also concern that jobs as BCaBAs are not as prevalent as RBT and BCBA jobs, meaning students with bachelor's degrees might accept jobs they are overqualified for or will need additional training to work as BCBAs.

Some faculty felt that expanding and enhancing undergraduate behavior analysis education in Florida and incentivizing students to stay in the state for graduate training and work would lead to expanded and improved clinical services in the state. They asserted that students with undergraduate and graduate training in behavior analysis might be better prepared for clinical roles than those who only received graduate training.

General recommendations:

- Exposing undergraduate students to a wider range of populations and job opportunities within behavior analysis, to increase the range of interests when students are first exposed to the science of behavior analysis.
- Universities should work with sites to increase undergraduate practicum opportunities to help them gain experience hours sooner and help them develop a wide range of interests.
- Directing undergraduate students to the numerous strong graduate programs in Florida to keep talent local.

Graduate Training Practicum Experience

Florida offers a number of quality graduate programs across the state. All the programs interviewed offered on-campus graduate training that leads to the BCBA credential, and three offered online or hybrid options. We contacted Florida providers to identify popular exclusively online programs among their staff and found that several students attended Arizona State's online programs. The BACB provided information that most students who attended and passed the board exam in Florida attended Florida Tech or ABA España's online programs. Thus, there is an opportunity to enhance online training as it directly relates to the providers in Florida by targeting the programs that are producing the most certificants.

Classes Outside of VCS

Most of the classes offered outside of the VSC include practicum and supervision classes. One university offered a career preparation course where students learned about job seeking, determining when they might be in a position to start a business, identifying ethical companies, etc. Another university required developmental psychology to help

students identify developmentally appropriate goals and programming. No programs offered courses in practical skills like billing. South Florida universities appeared to focus more on ethics issues, given the issues with fraud in South Florida. However, because students trained across Florida sometimes move to South Florida to practice, this focus should be expanded across every program.

Practicum Sites and Vetting

Most institutions reported that most of the practicum sites are early intervention programs. The reasons for this included that this population is preferred by students, the pay is higher, and there are better/high-quality sites available. There is a need to develop more high-quality sites that serve diverse populations like group homes and residential centers. One institution required students to obtain at least two different experiences within or across organizations.

Some institutions require sites to be approved while others vet the supervisor or do not vet sites or supervisors at all. When schools vet sites, they use a checklist and conduct a site visit. All schools that vet sites have removed sites after misconduct or other issues. Schools that do not vet sites work with students to identify quality experiences and manage issues as they arise. Schools opting not to vet sites said that many students come into their program already working at an ABA organization and it is difficult for them to require that students switch sites. One institution gathers all practicum supervisors periodically to support their efforts and engage them around the university's goals and expectations. One institution had collaborative and financial relationships with a very small number of sites and all students obtain their hours at those sites exclusively.

Practicum Experiences

Practicum processes and experiences varied widely across universities, which suggests there is room to identify best practices. Most universities included competencies that students were either required to demonstrate to pass or that were suggested to the sites. Each program created its own competency checklist, which means they could vary considerably across programs. At some institutions, students could check off on competencies at the university clinic or during role play if they were unable to practice the skill at their site.

One program reported that half of their students did not complete their practicum at their employer, which was unusual. They said they found that students were often not gaining appropriate experience when they were working as RBTs. Students who complete their practicum at their employer still do unpaid work to gain experience.

In some cases, faculty served as practicum supervisors, or the responsibility was shared between the site and the faculty. In these cases, faculty had to carefully navigate

supervision to avoid making recommendations that conflicted with the BCBA overseeing the case.

Master's Thesis/Capstone

All training on-campus programs reported requiring a capstone or thesis. Online programs did not list this requirement but reported that they would be adding this component based on the new accreditation standards. Most programs reported that about half of students complete their thesis or capstone at their practicum site. The faculty expressed that most theses and capstones were based on student interests or course content, which sometimes differed from their accessible clinical population.

General recommendations:

- Develop and disseminate training for faculty, clinical personnel, and graduate students on designing clinically relevant research and projects.
- Graduate students could benefit from practical career-focused courses and courses that expose them to diverse populations and settings.
- FABA or other local associations could offer workshops or other forms of guidance for new professionals to help them plan their careers and gain practical skills.
- Given the faculty expertise that exists across the state, Florida universities could offer micro-credentials for specialized skills such as managing challenging behavior, feeding, and school consultation.
- Florida programs would benefit from a shared list of competencies and implementation recommendations to avoid duplicate efforts and maximize effectiveness.
- A strategic plan should be created to expand student interest and experiences with diverse populations and client concerns.
- Best practices for practicum design should be collected and disseminated.
- Leverage the expertise of Florida faculty and establish a consortium of Florida universities to facilitate resource sharing and the development of specialized training programs to serve diverse populations.

Part 3: Stakeholders' Perspectives on ABA Service Provision, Training, Supervision, and Workplace Conditions

Rationale

The research team developed three surveys based on our focus group findings and input from task force members. Those surveys were then disseminated to key stakeholders that either provide or are recipients of ABA services. The surveys disseminated to behavioral service providers (i.e., BCBAs, BCaBAs, RBTs) aimed to identify factors affecting ABA service provision to inform recommendations for increasing the quality of training, supervision, and workplace conditions in Florida. The research team also developed a caregiver survey to identify the experiences of families who are pursuing or currently receiving ABA services to inform recommendations to increase access to and the quality of ABA services in Florida. Collectively, the information obtained from key ABA service providers and recipients could inform policy, systems, educational, and training practices that would generate high-quality ABA service providers and supervision of trainees and promote meaningful outcomes for ABA service recipients with complex behavioral needs.

Method

Participants and Recruitment

We used purposive sampling to recruit BCBAs, BCaBAs, RBTs, and caregivers of individuals who have sought or experienced ABA therapy. Specifically, we emailed electronic flyers and direct links to the Qualtrics surveys to our collaborative task force members, university staff, and community agencies. The collaborative task force, university staff, and community agencies distributed recruitment materials to colleagues and prospective participants via email or social media posts. We also distributed our electronic survey link at community applied behavior analysis events. The service providers' surveys included screening questions that requested the respondents' credentials, geographical location, clinical role, and credential requirements. The caregiver survey included screening questions that requested geographical location and caregiver status. These screening questions facilitated the inclusion of clinical, credentialed providers and service recipients within Florida.

Surveys

We created two electronic surveys intended for BCBAs/BCaBAs and RBTs providing ABA therapy in Florida. The BCBA/BCaBA and RBT surveys included questions about the respondents' (a) clinical role and responsibilities, (b) schedule consistency and pay, (c)

working conditions (e.g., burnout, Dolan et al., 2014; intention to leave, Michaels & Spector, 1982; job satisfaction, Sinval & Marôco, 2020), (d) training, (e) supervision, and (f) demographics and background information. The caregiver survey included questions about the respondent's and child's (a) demographic and background information, and (b) experience accessing ABA services across settings (i.e., clinic or home, school, group home) and the lifespan (i.e., childhood to adulthood). The surveys included open-ended, rating scales, and multiple-choice questions.

Data Analysis

We conducted a descriptive analysis for each question and statistical analyses to evaluate the relations between burnout, satisfaction, or intention to leave with other work-related variables. Unless otherwise noted, relations between two numeric variables are examined with Pearson's Correlation (R). Relations between a categorical variable and the outcomes of interest were examined with Multivariate Analysis of Variance (MANOVA) to compare the groups on a linear combination of the three dependent variables and avoid Type I error inflation that could be caused by running multiple ANOVAs for each dependent variable.

Our specific hypotheses for the BCBA/BCaBA survey included:

Hypothesis 1: Age of population served is related to satisfaction, intention to quit, and burnout.

Hypothesis 2a: Work setting is related to satisfaction, intention to quit, and burnout.

Hypothesis 2b: The requirement to sign a non-compete agreement is related to satisfaction, intention to quit, and burnout.

Hypothesis 3: The extent to which one provides supervision is related to satisfaction, intention to quit, and burnout.

Hypothesis 4: Supervision caseload is related to satisfaction, intention to quit, and burnout.

Hypothesis 5: Job Control is related to satisfaction, intention to quit, and burnout.

Hypothesis 6: Stability in pay is related to satisfaction, intention to quit, and burnout.

Hypothesis 7: Pay satisfaction is related to satisfaction, intention to quit, and burnout.

Hypothesis 8: Degree type is related to satisfaction, intention to quit, and burnout.

Hypothesis 9: Format of degree program is related to satisfaction, intention to quit, and burnout.

Hypothesis 10: Completed supervised experience as a required part of a graduate training program is related to satisfaction, intention to quit, and burnout.

Hypothesis 11: Serving a population similar to that served during supervised fieldwork (Q55) is related to satisfaction, intention to quit, and burnout.

Hypothesis 12: The extent to which one feels prepared for the job is related to satisfaction, intention to quit, and burnout.

Hypothesis 13: Degree level is related to satisfaction, intention to quit, and burnout.

Hypothesis 14: Race is related to satisfaction, intention to quit, and burnout.

Hypothesis 15: Gender is related to satisfaction, intention to quit, and burnout.

Hypothesis 16: Age is related to satisfaction, intention to quit, and burnout.

Our specific hypotheses for the RBT survey included:

Hypothesis 1: Crisis management training is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 2: Sufficient training in managing clients' challenging behavior is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 3: Job tenure is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 4: Work setting is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 5: RBTs currently pursuing a degree will indicate different levels of job satisfaction, intention to quit, and burnout than those not currently pursuing a degree.

Hypothesis 6: Gender is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 7: Race is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 8: Age is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 9: Working conditions are related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 10: Satisfaction with pay is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 11: Pay predictability is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 12: The requirement to complete unpaid tasks outside of one's shift is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 13: Access to healthcare benefits as part of the job is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 14: Hours worked (Full-time vs. part-time) is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 15: Satisfaction with supervision is related to RBT job satisfaction, intention to quit, and burnout.

Hypothesis 16: Having sufficient training to implement skill acquisition plans is related to RBT job satisfaction, intention to quit, and burnout.

To determine the best predictors of job dissatisfaction, quitting intention, and burnout, multiple regression analysis and relative weight analyses were performed on each dependent variable across surveys.

BCBA and BCaBA Survey Results

We received 217 survey submissions. A final sample of 180 responses met our inclusion criteria (i.e., were at least $2/3$ complete). Our sample included BCBAs (83.3%), BCaBAs (10.0%), BCBA-Ds (5.6%), and Florida Behavior Analysts (1.1%). Respondents reported having their BCaBA or BCBA credential between 3 months to 35 years. Respondents reported delivering ABA services across 44 counties in Florida, with a portion serving

clients in more than one county (21.9%). Respondents reported they were between 24 and 72 years of age. Table 3-1 provides the demographics and professional information of our sample.

Table 3-1

BCaBA and BCBA Demographics and Professional Information

Variable	*n*	%
Demographic Variables		
Gender		
Woman	120	82.2
Man	23	15.8
Nonbinary	3	2.1
Race/Ethnicity		
White, Non-Hispanic	103	63.6
Hispanic or Latino/e	45	27.8
Black or African American	12	7.4
Asian	3	1.9
Middle Eastern or North African	1	<1
West Indian	1	<1
Multiracial	1	<1
American Indian or Alaska Native	1	<1
Prefer not to answer	1	<1
Education		
College graduate (4- or 5-year program)	9	5.7
Master's degree (or other post-graduate training)	136	86.8
Doctoral degree (PhD., MD, EdD, DVM, DDS, JD, etc.)	12	7.6
Professional Information		
Pursued credential		
higher BACB	5	13.7
doctorate or BCBA-D	6	6.9
non-BACB	17	10.6
Language Delivering Services In		
English only	111	73
English and another language	35	26.3
Spanish	40	23
Portuguese	2	1.3

ASL or sign language	1	<1
French	1	<1
Arabic	1	<1

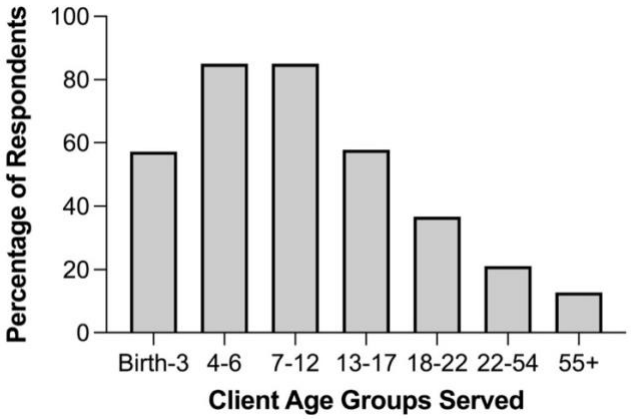
Clinical Role and Responsibilities

Our respondents reported that their current position involved being a supervising behavior analyst (57.2%), direct service provider (31.1%), clinical director (28.9%), owner or executive director (24.4%), practicum or fieldwork supervisor (16.7%), RBT trainer (15.6%), or another role (6.1%). Respondents reported serving a range of individuals with different diagnoses such as ASD (96.1%), attention deficit or hyperactivity disorder (60.0%), intellectual or developmental disability (52.8%), oppositional defiant disorder (41.1%), emotional or behavioral disorders (30.0%), learning disability (23.3%), or no diagnosis (7.2%).

Figure 3-1 shows that respondents reported serving individuals across the lifespan. Most respondents reported serving children between 4-12 years, whereas fewer than 60% reported serving individuals between 0-3 and 13-17 years. Fewer than 40% of respondents reported serving adults across different age ranges.

Figure 3-1

Percentage of Respondents Serving Individuals Across the Lifespan

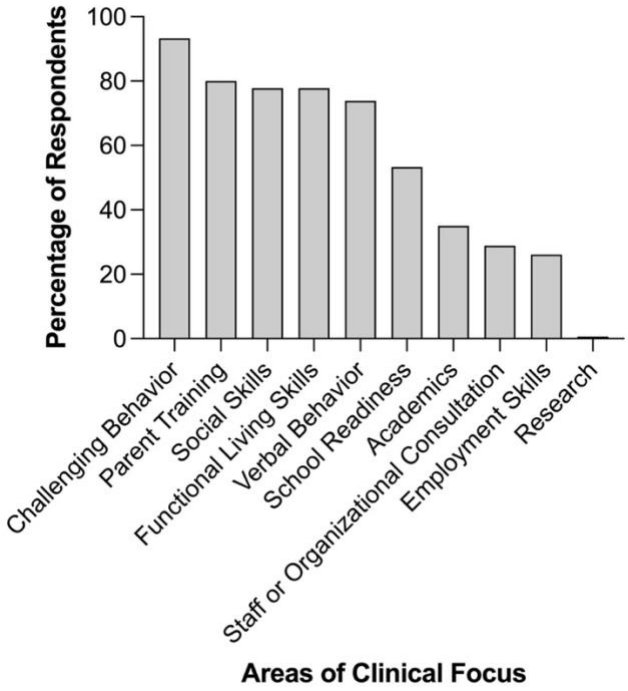


Note. 100% of the respondents answered the client age group question.

Figure 3-2 shows that respondents reported a range of clinical focus areas. Most respondents' direct-client clinical focuses involved the assessment and treatment of challenging behavior and some form of skill building.

Figure 3-2

Areas of Clinical Focus



Note. 100% of respondents answered the clinical focus question.

Respondents reported that their clinical cases include clients who are both similar to and dissimilar from (49.4%), similar to (42.7%), or dissimilar from (7.9%) the clients they served during their supervised fieldwork. Respondents reported that they deliver ABA therapy in one or multiple settings: home (72.8%), school (67.2%), clinic (57.2%), community (56.1%), via telehealth (25.0%), group home or residential setting (19.4%), hospital-based inpatient unit (2.2%), or another area (e.g., adult day program or workplaces; 4.4%). Most respondents (81.1%) reported having the opportunity to decline or transfer cases outside of their scope of competence. Respondents also reported they have a say in client assignment based on behavioral needs (67.8%), service location (65.0%), or other factors (e.g., availability, funders, caseload capacity, clinical expertise, level of experience, or respondent's preference; 8.3%). Some of these respondents reported they had no say in client assignments (14.4%).

Supervision

Respondents reported providing clinical supervision (43.3%), fieldwork supervision required for BACB certification (31.1%), both clinical and fieldwork supervision (13.3%), or no supervision (12.2%) as part of their role. Respondents reported that their weekly

supervision hours ranged from 1-4 (22.8%), 20+ (20.6%), 10-14 (16.1%), 5-9 (15.6%), 15-19 (10.6%), or that they did not provide supervision as part of their role (13.9%). Respondents reported that they supervise 1-6 (43.3%), 7-12 (30.6%), 0 (13.3%), 13-18 (6.7%), or 19+ (6.1%) clinical cases. Respondents strongly or somewhat agreed (62.8%) that their supervision schedule is restricted by funders or other non-clinical criteria.

Some respondents indicated that providing supervision was one of their favorite aspects of their work, whereas others reported that supervision served as a barrier to their job effectiveness. Respondents who reported that supervision was preferred expressed that they enjoyed training, mentoring, and seeing their supervisees succeed. For example, one respondent stated that their favorite part of work involved *"making noticeable changes in the clinic" and "RBTs expressing to [them] that they feel supported and empowered to do their job well."* Another respondent shared that they felt they could make a difference in their client's lives *"through [the] training and supervision of RBTs and BCBAs."* Alternatively, another respondent reported that they were *"doing face to face direct supervision for 25 hours a week or more,"* which took away from their time *"to research or come up with additional environmental supports."* Another respondent indicated that providing supervision was not included in their billable hours unless the client was present, which hindered their opportunities to provide feedback. These responses suggest supervision may be enjoyable under certain conditions for some practitioners, but dedicating too much time to supervision may also take away time from other job responsibilities.

Schedule Consistency and Pay

Most respondents reported being full-time employees (81.0%) and that their weekly pay is predictable (73.7%). These respondents reported receiving payment for non-client direct hours at their typical (40.8%) or a reduced (10.1%) rate. Some respondents reported that they do not receive payment for completing non-client direct hours (31.3%). A portion of respondents provided additional comments (17.9%; e.g., indicating that payment for non-client direct hours is contingent on meeting billable hour goals, that they receive payment for some activities but not supervision, that they can bill for assessment hours or caregiver training periodically, or that they are salaried). Slightly more than half of the respondents reported completing unpaid work tasks after their shifts (52.0%). More than half of respondents reported that they have access to healthcare (61.1%), paid time off (65.4%), funds to complete continuing education events (58.7%), and retirement (53.1%). Respondents reported being very satisfied or satisfied (47.5%), dissatisfied or very dissatisfied (31.3%), or neither satisfied nor dissatisfied (21.8%) with their current pay.

Respondents reported that they receive insurance reimbursement for the following activities: behavior plan development (77.2%), behavior plan modification (73.3%), RBT supervision (56.1%), BCaBA supervision (25.0%), writing session notes (13.3%), fieldwork supervision (10.6%), mandatory staff meetings (5.6%), mandatory trainings (5.0%), and

other (e.g., direct service, parent training, staff training; 15.0%). Respondents reported that they receive payment (regardless of insurance reimbursement) for the following activities: behavior plan development (81.1%), behavior plan modification (80.6%), RBT supervision (75.0%), mandatory staff meetings (68.3%), mandatory trainings (65.0%), fieldwork supervision (53.3%), writing session notes (57.2%), BCaBA supervision (50.0%), and other (12.2%; e.g., performance management, organizational behavior management consultation, professional development, or monitoring documentation). Some respondents commented that they complete some of these tasks at a reduced pay rate or have restricted time allotment for these activities to result in payment.

Working Conditions

Table 3-2 includes respondents' reports regarding workplace cleanliness, job safety, access to tools to execute their job well, job satisfaction, and intention to leave their current job.

Table 3-2

Percent Agreement for Questions on Working Conditions, Job Satisfaction, and Intention to Leave

Question	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
My working conditions are clean.	45.6%	35.6%	12.2%	6.1%	0.6%
I feel safe at my job.	49.2%	36.3%	8.4%	5.0%	1.1%
I have the tools needed to do my job well.	37.2%	39.4%	13.9%	7.2%	2.2%
I feel fairly satisfied with my present job.	29.6%	42.5%	10.1%	14.5%	3.4%
Most days I am enthusiastic about my work.	25.7%	42.5%	18.4%	12.8%	0.6%

Each day at work seems like it will never end.	4.4%	16.7%	18.3%	52.8%	7.8%
I find real enjoyment in my work.	32.8%	48.3%	12.2%	5.0%	1.7%
I consider my job to be rather unpleasant.	1.1%	11.7%	10.6%	49.2%	27.4%
I consider my job to be rather pleasant.	24.0%	52.0%	9.5%	13.4%	1.1%
I often seriously consider leaving my job.	12.9%	20.8%	20.2%	15.2%	30.9%
I intend to quit my current job.	9.5%	7.8%	20.1%	25.1%	37.4%
I have started to look for other jobs.	10.1%	15.6%	8.9%	24.6%	40.8%

Note. 99.4% of the respondents answered the rating scale questions.

Respondents reported experiencing no burnout (11.1%), occasional stress not rising to the level of burnout (39.4%), or varying levels of burnout (49.4%). The respondents who reported burnout indicated they were experiencing one to two symptoms (30.0%), persistent symptoms that result in frequent work-related frustration (12.2%), or a level of symptoms that might require seeking help (7.2%). Respondents descriptively reported that their favorite parts of their job included working directly with clients, families, and supervisees and observing client progress. Respondents reported barriers to doing their job effectively, such as staff shortages, inadequately trained and unprofessional staff, insurance requirements and approvals, insurance billing practices (e.g., no simultaneous billing of supervisor and direct staff), inconsistent work hours and scheduling, lack of support (e.g., administrative or training), lack of time to complete all essential activities, lack of leadership and guidance, long commutes, large caseloads with inadequate hours, inconsistent wages, and agency- or setting-based restrictions.

Training

Respondents reported they had a degree in behavior analysis (46.9%), psychology (18.1%), special education (18.1%), multiple or specialized focuses in psychology, behavior analysis, education, or special education (11.9%), or counseling (5.1%). Respondents reported completing their BCBA coursework as part of (a) their degree program (71.0%) or (b) a stand-alone certificate program (29.0%). Respondents reported completing their BCBA coursework online (49.4%), in-person (38.6%), or both online and in-person (11.9%).

Respondents descriptively reported varying factors contributed to their graduate program selection:

- Cost or affordability
- Referrals from advisors or colleagues
- Geographic location
- Faculty availability and expertise
- Funding opportunities (e.g., tuition waiver, assistantship funds, employer stipends)
- BCBA exam pass rate
- Academic rigor
- Practicum
- Modality (i.e., in-person versus online)
- Opportunity to maintain full-time employment

To summarize, most respondents reported economic, academic, and training factors that contributed to their graduate program selection.

Slightly more than half of respondents reported they were required to complete supervised experience hours as part of their graduate program (54.9%). Slightly more than half of respondents who were required to receive supervised fieldwork experience as part of their degree program reported completing their supervised fieldwork in a non-university identified placement (52.7%). Fewer of these respondents completed their supervised fieldwork experience in a university-approved community-based placement (25.8%) or university-based program (21.5%). Most respondents reported receiving individual or group supervision by on-site staff (79.4%). Fewer respondents reported receiving individual or group supervision by university faculty or staff (28.3%).

Respondents reported a range of clinical focuses during their supervised experience, which included assessment and treatment of challenging behavior (87.3%), adaptive or functional living skill building (75.8%), social skill building (75.8%), language or verbal behavior development (70.9%), academic skill building (50.9%), parent training (46.7%), school readiness (44.8%), staff or organizational consultation (30.3%), employment skills (27.9%), and other areas (e.g., adult care, staff training, 9.1%). Therefore, most respondents' supervised experiences with direct client contact involve the assessment and

treatment of challenging behavior and some form of skill building. Respondents reported that their supervised experience included training and in-situ practice in the following areas: natural environment teaching (88.0%), function-based treatment of challenging behavior (84.3%), discrete trial instruction (83.7%), preference or reinforcer assessment (81.3%), skill assessment (76.5%), behavioral skills training (73.5%), functional analyses (63.3%), providing supervision and feedback (54.2%), and other areas (6.0%).

Most respondents strongly agreed or agreed (68.7%) that their supervised fieldwork experience prepared them for their current job role. Some respondents descriptively reported that they felt prepared due to the variety of experiences they had before pursuing their credential or supervised fieldwork. Most respondents strongly agreed or agreed (62.6%) that they felt prepared for their job as a BCBA. Some respondents reported their personal commitment to learning beyond the scope of their coursework and supervised experience in conjunction with prior experience prepared them for their current job role. More than half of respondents disagreed or strongly disagreed (58.7%) with feeling restricted to working with certain populations based on their supervised experience.

Respondents descriptively reported that the most important part of their training involved:

- Working with clients with varying behavioral needs across the lifespan,
- Direct application of conceptual systems and procedures with clients in a variety of settings (e.g., clinic, home),
- Making data- and evidence-based decisions,
- Focusing on function-based assessment and treatment of challenging behavior,
- Directly observing client progress,
- Receiving feedback and experiencing behavioral skills training,
- Accessing support from high quality or a variety of supervisors and experts in the field of behavior analysis, and
- Opportunities to complete activities similar to a BCBA under supervision (e.g., caregiver and staff training, completing assessments, writing reports).

To summarize, respondents provided examples that varying practical experiences and guidance from supervisors were the most important parts of their training in preparation for becoming a BCBA when working with individuals with complex behavioral needs.

Respondents descriptively reported that they wish they could change multiple aspects of their training:

- Access to high-quality supervisors,
- Practice with parent training and supervisory practices (e.g., providing feedback to trainees),

- Experience with clients across the lifespan and with varying behavioral needs,
- Preparation for insurance- and billing-related practices (e.g., formal assessments, writing reports), and
- Transitioning from structured practicum experiences to community, clinic, or home-based service implementation as a BCBA.

To summarize, respondents provided examples that they would have changed their practical training to incorporate more high-quality supervision and varying practical experience focuses (e.g., variety in client age groups and needs, implementing supervisory responsibilities under supervision) before transitioning to a BCBA role.

Statistical Analyses

Five items were intended to measure job satisfaction, but one item was dropped to increase the internal consistency of the scale. Three items assessed intentions to quit. One item was used to measure burnout. Means, standard deviations, and reliability coefficients of the dependent variables are presented in Table 3-3.

Table 3-3

Dependent Variable Measures Descriptive Statistics

Variable	Mean	SD	Cronbach's α	# items
Job (dis)satisfaction	2.10	.83	.89	4
Intention to Quit	2.42	1.28	.92	3
Burnout	2.65	1.07	n/a	1

Note. SD = Standard Deviation. Skewness and kurtosis values were all below 1.0, indicating that these dependent variables were normally distributed. Cronbach's a is a measure of internal consistency.

Hypothesis 1 (Mostly unsupported): Age of population served is related to satisfaction, intention to quit, and burnout.

The outcomes of interest were not significantly related to any particular age groups served, with only one exception. Those who served ages 22-54 reported slightly lower

burnout than those who did not serve this age group, as indicated by the small negative correlation (R = -.15, p < .05), but serving this age group was not significantly correlated with job dissatisfaction or quit intentions.

Hypothesis 2a (Mostly unsupported): Work setting is related to satisfaction, intention to quit, and burnout.

Working in a home setting had a small, positive relationship with job (dis)satisfaction (R = .16, p < .05), intent to quit (R = .16, p < .05), and burnout (R =.15, p < .05); however, none of the other settings (i.e., clinic, school, community, group home/residential, hospital-based inpatient, hospital-based outpatient, or telehealth) were significantly related to any of the three outcome variables.

Hypothesis 2b (Partially supported): The requirement to sign a non-compete agreement is related to satisfaction, intention to quit, and burnout.

Those who were required to sign a non-compete against taking clients to other organizations were significantly more dissatisfied, had higher intentions to quit, and reported higher burnout (R = .15, R = .21, R = .18, respectively, all p < .05). Those who were required to sign a non-compete against working in a certain area reported significantly higher intentions to quit (R = .16), but this type of non-compete was not related to job dissatisfaction or burnout.

Hypothesis 3 (Unsupported): The extent to which one provides supervision is related to satisfaction, intention to quit, and burnout.

Multivariate Analysis of Variance (MANOVA) was used to compare a linear combination of the three dependent variables across four groups: (1) those who engage in clinical supervision, (2) those who engage in fieldwork supervision, (3) those who engage in both, and (4) those who do not engage in any supervision. Although the means (across the three outcome variables) were consistently higher for those who do not supervise compared to those who do (Table 3-4), the overall MANOVA results suggested that these effects were not statistically significant (Wilks' Lambda = .94, n.s.).

Table 3-4

Comparison of Outcome Variables by Supervision Role

Dependent Variable	Supervision Role?	Mean	Std. Error	CI Lower Bound	CI Upper Bound

Job (dis)satisfaction	No	1.693	0.172	1.353	2.033
	Yes, clinical supervision	2.099	0.091	1.919	2.28
	Yes, fieldwork supervision for staff accruing hours for BACB certification	2.209	0.109	1.994	2.424
	Both clinical and fieldwork supervision	2.056	0.19	1.68	2.432
Intention to leave/turnover factor composite score	No	1.848	0.267	1.32	2.377
	Yes, clinical supervision	2.415	0.142	2.134	2.695
	Yes, fieldwork supervision for staff accruing hours for BACB certification	2.612	0.169	2.278	2.946
	Both clinical and fieldwork supervision	2.315	0.296	1.731	2.899
Overall, based on your definition of burnout, how would you rate your level of burnout?	No	2.227	0.226	1.781	2.674
	Yes, clinical supervision	2.577	0.12	2.34	2.814
	Yes, fieldwork supervision for staff accruing hours for BACB certification	2.836	0.143	2.554	3.119

	Both clinical and fieldwork supervision	2.889	0.25	2.395	3.383

Note. Multivariate analysis of variance (MANOVA) results indicate that the overall difference in outcomes across supervision roles is not significant (Wilks' Lambda = .94, n.s.). Thus, any differences in means across groups should be interpreted with caution. CI = 95% confidence interval.

Hypothesis 4 (Supported): Supervision caseload is related to satisfaction, intention to quit, and burnout.

Supervision caseload was positively related to job (dis)satisfaction (R = .26, p < .05), intent to quit (R = .26, p < .05) and burnout (R = .27, p < .05).

Hypothesis 5 (Mostly Supported): Job Control is related to satisfaction, intention to quit, and burnout.

Control over client assignment was assessed with the item stem "I have a say in client assignment based on…", where one point was assigned to each aspect of control endorsed by the respondent ["service location" (1 point), "client behavioral needs" (1 point), and "other" (1 point)]. Control over RBT assignment was assessed with the item stem "I can select or assign RBTs to my caseload based on…", where one point was assigned for each aspect of control endorsed by the respondent ["service location" (1 point), "Client behavioral needs" (1 point), "RBT scope of competence" (1 point), and "other" (1 point)]. Finally, the item "My organization allows me to decline or transfer a case if it is outside of my scope of competence" was recoded into a dichotomous variable (0=no, 1=yes). Results are summarized below:

- Both control over client assignment and control over RBT assignment were significantly (p < .05) negatively related to intent to quit (R = -.25 and -.17, respectively) as well as intention to quit (R = -.28 and -.15, respectively). However, neither type of control was significantly related to burnout.
- Being allowed to decline or transfer if outside of competence is negatively related to job dissatisfaction and intention to quit (R = -.16 and -.22, respectively), and negatively (though marginally) related to burnout (R = -.13, p < .08).
- Because the results were very similar between types of control, an overall job control score was also created by summing the three control scores described above. This overall job control variable was also negatively related to job dissatisfaction (R = -.24, p < .05) and quit intentions (R = -.26, p < .05), but did not significantly relate to burnout.

Hypothesis 6 (Unsupported): Stability in pay is related to satisfaction, intention to quit, and burnout.

The item assessing pay stability ("My paid hours vary each week") was not significantly related to any of the three outcome variables.

Hypothesis 7 (Supported): Pay satisfaction is related to satisfaction, intention to quit, and burnout.

The item assessing pay satisfaction ("I am satisfied with my current pay") was negatively related to job dissatisfaction, intent to quit, and burnout (R = -.41, -.45, -.42, respectively, all $p < .05$).

Hypothesis 8 (Unsupported): Degree type is related to satisfaction, intention to quit, and burnout.

The effect of degree type (Psychology vs. Behavioral analysis vs. Special education vs. Counseling vs. Other) was assessed with a multivariate analysis of variance (MANOVA). The effect of degree type was non-significant (Wilks' Lambda = .93, p = .34).

Hypothesis 9 (Unsupported): Format of degree program is related to satisfaction, intention to quit, and burnout.

The effect of degree program format (online vs. In-person vs. hybrid) was assessed with a multivariate analysis of variance (MANOVA). The effect of format was non-significant (Wilks' Lambda = .97, p = .44).

Hypothesis 10 (Unsupported): Completed supervised experience as a required part of a graduate training program is related to satisfaction, intention to quit, and burnout.

The effect of completing supervised experience as a required part of a graduate training program was assessed with a multivariate analysis of variance (MANOVA), but the multivariate effect was non-significant (Wilks' Lambda = .98, p = .25).

Hypothesis 11 (Unsupported): Serving a population similar to that served during supervised fieldwork is related to satisfaction, intention to quit, and burnout.

The effect of clinical population similarity was initially assessed with a multivariate analysis of variance (MANOVA), but Levene's Test indicated that the equality of error variances assumption was violated for the quit outcome variable. We therefore conducted non-parametric tests comparing median levels of the dependent variables across groups. The results were not significant for any of the dependent variables, suggesting that those who currently serve the same population they served during supervised fieldwork training do

not report significantly different median dissatisfaction, intent to quit, or burnout than those who serve the same population or a mix of similar and dissimilar clients.

Hypothesis 12 (Unsupported): The extent to which one feels prepared for the job is related to satisfaction, intention to quit, and burnout.

Two items assessed feelings of preparation for the job ("My supervised fieldwork experience prepared me for my current role" and "I feel like I was adequately prepared for my job as a BCBA"). Responses to these two items were averaged into one "preparation" variable (Cronbach's alpha = .84), but feelings of preparation were not significantly related to any of the three outcome variables.

Hypothesis 13 (Unsupported): Degree level is related to satisfaction, intention to quit, and burnout.

A MANOVA indicated no significant differences in the outcome variables based on degree level (bachelor's vs. master's vs. doctorate) (Wilks' Lambda = .96, p = .33). However, it should be noted that the sample consisted of only nine respondents with bachelor's degrees and only 12 respondents with doctorates, which could have limited the statistical power of this hypothesis test.

Hypothesis 14 (Unsupported): Race is related to satisfaction, intention to quit, and burnout.

Most racial groups consisted of too few respondents to analyze; therefore, the only statistical comparison that could be made was between those who identified as white (n = 103) versus those who did not identify as white (n = 76) and between those who identified as Hispanic or Latino/e *(*n = 45) vs. those who did not identify as Hispanic or Latino/e (n = 134). Both comparisons were tested with a MANOVA, but no significant differences were found.

Hypothesis 15 (Partially supported): Gender is related to satisfaction, intention to quit, and burnout.

Because the survey question about gender was open-ended, responses were coded to allow statistical comparison. The written responses "female" and "woman" were coded as woman and the responses "male" or "man "were coded as man. Because of the small number of participants who wrote in "nonbinary" or any other descriptor, these data points were treated as missing, and gender was treated as dichotomous for purposes of the analysis. A MANOVA comparing men and women on the outcome variables indicated no significant difference in outcome variables between men and women; however, Levene's tests of equality of error variance indicated this assumption was violated for the quit intention outcome. We therefore conducted *t*-tests for each of the dependent

variables separately, using the "equal variances not assumed" procedure for the quit intent outcome variable. No significant differences were found between men and women on the job dissatisfaction or burnout; however, women showed significantly higher quit intent (M = 2.42) than men (M = 1.96), t(37.20) = -1.91, p < .03).

Hypothesis 16: (Partially supported): Age is related to satisfaction, intention to quit, and burnout.

Age was found to be negatively related to burnout (R = -.21, p< ,05) but unrelated to the other outcomes. (This is consistent with research that suggests older adults have better emotional coping skills.)

Multiple Regression Analysis

A key research question stemming from the results above is: What are the best or most important predictors of job dissatisfaction, quit intent, and burnout?

To examine the unique contribution of each predictor, multiple regression analysis and relative weight analysis were performed on each dependent variable. Table 3-5 displays the results of the multiple regression and relative weight analysis for each outcome variable. By examining the last column, the rescaled relative weights tell us the proportion of explained variance accounted for by each predictor. For both job dissatisfaction and intention to quit, pay dissatisfaction was the most important predictor (I.e., accounted for the most variance in the dependent variable), followed by control and caseload. For burnout, pay dissatisfaction again carried the most weight; however, caseload and age were the next most important predictors of burnout, while control was not a significant predictor of burnout.

Table 3-5

Multiple Regression and Relative Weight Analysis Results: BCBA Survey

Predictor	Unstd. Coeff. (B)	Std. Error	Std. Coeff. (Beta)	p	Raw Relative Weight	Rescaled Relative Weight
DV: Job Dissatisfaction						
Noncompete-Org	0.122	0.161	0.059	0.449	0.0131	5.18

Noncompete-Geo	0.043	0.256	0.013	0.868	0.0015	0.6
Caseload	0.107	0.059	0.134	0.073	0.047	18.61
Control	-0.101	0.031	-0.24	0.001	0.0532	21.06
Pay (Dis)satisfaction	0.234	0.053	0.332	<.001	0.1326	52.47
Age	-0.005	0.005	-0.068	0.358	0.0053	2.08
Total R^2			0.23		0.25	
DV: Intention to Quit						
Noncompete-Org	0.385	0.244	0.118	0.116	0.0272	9.12
Noncompete-Geo	0.101	0.387	0.019	0.795	0.0071	2.37
Caseload	0.191	0.089	0.153	0.035	0.0443	14.82
Control	-0.159	0.047	-0.243	<.001	0.0578	19.34
Pay (Dis)satisfaction	0.39	0.081	0.353	<.001	0.1576	52.74
Age	-0.007	0.008	-0.061	0.397	0.0048	1.62
Total R^2			0.28		0.3	

DV: Burnout						
Noncompete-Org	0.271	0.211	0.099	0.2	0.018	7.13
Noncompete-Geo	-0.214	0.335	-0.049	0.524	0.0014	0.55
Caseload	0.151	0.077	0.144	0.053	0.0475	18.88
Control	-0.033	0.041	-0.061	0.412	0.0082	3.26
Pay (Dis)satisfaction	0.331	0.07	0.357	<.001	0.1446	57.42
Age	-0.016	0.007	-0.177	0.017	0.0321	12.76
Total R^2			0.24		0.25	

Note. Noncompete-org = restricted from taking clients to another organization. Noncompete-geo = restricted from working in a certain geographical region. Caseload = supervision caseload. Total R^2 is interpreted as the proportion of variance in the dependent variable (DV) that can be explained by the set of predictors. Raw relative weight = the proportion of variance in the dependent variable that is appropriately attributed to each predictor. Rescaled relative weight = percentage of total *predicted* variance attributed to each predictor (raw relative weight divided by total R^2). Relative weights are scaled in terms of relative effect sizes; therefore, significance tests comparing them to zero are not provided. Predictors with the top four relative weights for each dependent variable are bolded.

Impact of Degree Program Format on Preparedness for Job. An additional research question involved whether the format of a degree program (Online vs. In-person vs. Hybrid) is related to feelings of preparedness for the job. Mean feelings of preparedness were as follows: in-person: *M* =3.71; online: *M* = 3.17; hybrid: *M* =3.55. Because the initial Levene's test indicated that the homogeneity of variance assumption was violated, we conducted the nonparametric, Kruskal-Wallis 1-way ANOVA to examine the overall effect of format on feelings of preparedness. However, the Kruskal-Wallis test indicated that the overall effect of degree format was only marginal (p = .06); therefore, multiple comparisons were performed.

RBT Survey Results

We received 131 survey submissions and only included submissions that were 2/3 complete. Our final sample included 83 RBTs.

Demographics and Professional Information

Respondents reported they were between 19 and 69 years of age. Table 3-6 provides additional demographic and professional information. Respondents reported having their RBT credential between 1 month to 8 years 4 months. When asked why they entered the field, most respondents indicated that they had a personal connection to providing services due to having a child or family member with developmental disabilities, that they had a general love for working with children or a desire to help, that they switched to ABA during a career change or progression, that they were recommended to try ABA from another person, or that they otherwise "fell into" working in ABA. Respondents reported delivering ABA services across 19 counties in Florida, with a portion serving clients in more than one county (4.8%).

Table 3-6

RBT Demographics and Professional Information

Variable	*n*	%
Gender		
Woman	55	88.7
Man	6	9.7
Nonbinary	1	1.6
Race/Ethnicity		
White, Non-Hispanic	35	50.7
Hispanic or Latino/e	33	47.8
Black or African American	6	8.7
Asian	1	1.4
Prefer not to answer	1	1.4
Education		
High School Diploma or GED	10	14.5
Associate's degree	3	4.3
Bachelor's Degree	38	55.1
Master's degree (or other post-graduate training)	17	24.6
Other: Almost a bachelor's degree	1	1.4

Pursuing a Degree with a BACB-approved course sequence	45	65.2
Bachelor's Degree	11	15.9
Master's Degree	32	46.4
Doctoral Degree	2	2.9
Format of Higher degree		
Online	28	62.2
In-Person	11	24.4
Hybrid	6	13.3
ABA therapy delivery language		
English only	33	55
English and another language	27	45
Spanish	21	35
ASL or sign language	6	10
Creole	1	1.7
Work Setting		
Clinic	27	39.1
In-Home	12	17.4
School	18	26.1
Community or group home	2	2.8
Multiple Settings	10	14.5

Clinical Role and Responsibilities

Most respondents work with clients who display minor or severe challenging behavior (59.0%). Fewer than half of respondents do not work with clients who display challenging behavior (41.0%). Nearly all respondents reported working with clients who display skill deficits (98.8%). We describe the prevalence of paid and unpaid work tasks among our respondents in the *Schedule Consistency and Pay* section below.

Supervision

Most respondents reported their RBT supervisor had a BCBA credential (94.7%). Some respondents reported that their RBT supervisor held a BCaBA (14.5%), another approved RBT supervisor credential (9.2%; i.e., mental health counselor, 3.9%; psychologist, 2.6%; marriage and family therapist or clinical social worker, 1.3%), or BCBA-D (7.9%). Notably,

slightly more respondents reported receiving supervision from a non-BACB credentialed supervisor over a BCBA-D. One respondent reported they do not receive supervision (1.3%). Most respondents reported being supervised when providing ABA services for more than or exactly 5% of their monthly hours (85.1%). Fewer respondents reported receiving less than 5% (8.1%) or no supervision (5.4%) of their monthly hours providing ABA services, which is inconsistent with the BACB standards of supervision to maintain the RBT credential. Most respondents reported believing they receive sufficient supervision to complete their job with all (72.0%) or some (17.3%) of their clients.

Respondents reported that they were obtaining supervision to eventually become a BCBA (61.6%) or BCaBA (5.5%). Some respondents (32.9%) reported not receiving supervision to eventually obtain a higher BACB credential. Most respondents (70.8%) reported that their supervision referenced the BACB task list. Fewer respondents reported that they were unsure if (19.4%) or their supervision did not (9.7%) reference(d) the BACB task list. Most respondents reported their supervision always or often (65.7%) involved discussion about ethics. Fewer respondents reported their supervision sometimes (17.8%), rarely (8.2%), or never (8.2%) involved discussion about ethics. Most respondents strongly agreed or agreed (76.2%) they felt prepared for their future job as a BCBA/BCaBA. Most respondents strongly agreed or agreed (96.8%) with feeling confident in their supervisor's decision-making. Most respondents strongly agreed or agreed (92.9%) with feeling like their supervisor had the skills to teach them important clinical skills. Most respondents strongly agreed or agreed (81.4%) that their supervisor promoted their professional development.

We asked respondents what they liked about supervision. Respondents mentioned several qualities they liked about their supervisors and supervision frequency:

- Availability
- Modeling and frequent feedback
- Help and support
- Fielding questions and concerns
- Frequent supervision
- Good communication
- Good rapport with supervisee

We asked respondents what they would change about supervision. Respondents mentioned several qualities about their supervisors and supervision frequency:

- More feedback (e.g., performance evaluations, constructive feedback)
- More supervision (e.g., conducting observations across different settings and more frequently)

- Improved guidance or training (e.g., more modeling, more guidance on challenging behavior, and being present during observations as opposed to completing other tasks)
- Increased consistency within or across supervisors
- Opportunities for supervisees to provide supervisors with feedback, and
- Concrete supervision schedules

Working Conditions

Table 3-7 includes respondents' reports regarding workplace cleanliness, job safety, access to tools to execute their job well, job satisfaction, and intention to leave their current job.

Table 3-7

Percent Agreement for Questions on Working Conditions, Job Satisfaction, and Intention to Leave

Question	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
My working conditions are clean.	50.7%	40.6%	4.3%	2.9%	1.4%
I feel safe at my job.	54.4%	33.8%	7.4%	2.9%	1.5%
I have the tools needed to do my job well.	43.5%	37.7%	1.4%	13.0%	4.3%
I feel fairly satisfied with my present job.	39.1%	42.0%	4.3%	10.1%	4.3%
Most days I am enthusiastic about my work.	37.7%	46.4%	8.7%	4.3%	2.9%

Each day at work seems like it will never end.	7.2%	13.0%	17.4%	53.6%	8.7%
I find real enjoyment in my work.	39.1%	49.3%	8.7%	1.4%	1.4%
I consider my job to be rather unpleasant.	1.5%	11.8%	5.9%	47.1%	33.8%
I consider my job to be rather pleasant.	26.5%	54.4%	11.8%	7.4%	0.0%
I often seriously consider leaving my job.	10.1%	14.5%	8.7%	29.0%	37.7%
I intend to quit my current job.	4.3%	13.0%	5.8%	31.9%	44.9%
I have started to look for other jobs.	4.3%	21.7%	7.2%	27.5%	39.1%

Note. 81.9-83.1% of the respondents answered the rating scale questions.

Respondents reported experiencing no burnout (20.3%), occasional stress not rising to the level of burnout (42.0%), or varying levels of burnout (37.7%). The respondents who reported burnout indicated they were experiencing one to two symptoms (27.5%), persistent symptoms that result in frequent work-related frustration (2.9%), or a level of symptoms that might require seeking help (7.2%).

Schedule Consistency and Pay

Most respondents reported being full-time employees (60.0%). Fewer than half of respondents reported being part-time employees (40.0%). Most respondents reported receiving pay to complete work tasks such as working directly with clients with (91.3%) or without (92.8%) a supervisor present and writing client session notes (69.6%). Fewer respondents reported receiving pay for work tasks such as training other staff (39.1%),

assisting with initial assessments (34.8%), observing clients with another therapist (34.8%), and administrative tasks (33.3%). Respondents reported they either (a) do not receive alternative tasks (46.4%), or (b) do receive alternative tasks at a reduced (17.4%) or their typical (27.5%) pay rate when clients cancel appointments. Most respondents (68.6%) reported not being required to complete unpaid work tasks outside of their shifts. However, some respondents did report being required to complete unpaid work tasks outside of their shifts (31.4%).

Approximately half of respondents reported that they have access to healthcare (55.1%), paid time off (50.7%), and retirement (50.0%). Most respondents reported that their weekly pay is predictable (63.8%). Half of the respondents reported being very satisfied or satisfied with their current pay. Some respondents reported being neither satisfied nor dissatisfied (21.4%) or dissatisfied or very dissatisfied (14.3%) with their current pay. Respondents reported that they did not receive funding (47.2%), they received funding (38.9%), or other employees received funding (13.9%) to attend continuing education or professional development events.

Training

Respondents reported they completed their 40-hr RBT training (hereafter referred to as "credential training") at their previous job (35.4%), current job (28.0%), both jobs (1.2%), online (27.4%), or another location (i.e., university or school, independently; 7.3%). Most respondents completed their credential training online (67.1%) and fewer respondents completed their credential training in person (17.1%) or in a hybrid format (13.4%). Slightly more than half of respondents completed their credential training before their current job (54.2%) and fewer respondents completed their credential training as part of their current jobs' onboarding training (37.3%). Some respondents reported they completed their credential training before being hired (1.2%) or during onboarding training (2.4%) at a previous job. Few respondents reported completing their credential training while working as a behavior technician after the RBT credential was required (3.6%). Of the respondents who completed their credential training before being hired, most reported that they were required to have the RBT credential before being hired (64.4%). Of the respondents who completed their credential training during onboarding, most reported that they were paid at a reduced (54.8%) or their typical (6.8%) rate. Some of the respondents reported not receiving compensation while completing their credential training during onboarding (38.7%). Most respondents reported that their credential training was developed by an external agency (71.1%; e.g., online platform). Some respondents reported their credential training was developed by their current agency (9.6%) or that they were unsure about who developed their credential training (19.3%).

Most respondents completed their RBT competency assessment at their current (45.1%), previous (40.2%), or both (1.2%) jobs. Respondents reported that they began working with

clients independently after (a) obtaining RBT credential (32.5%), (b) observing a therapist with their clients (18.1%), (c) additional on-site training (15.7%), (d) observing a therapist with different clients (8.4%), (e) completing credential training (6.0%), or (f) a combination of the previously listed items (2.4%) or upon hire (15.7%). Respondents reported that they felt prepared to work independently with all (29.3%) or some (43.9%) clients or did not feel prepared (26.8%). Most respondents reported receiving crisis prevention and management training if they worked with children who displayed (59.2%) or did not display (61.8%) challenging behavior. Most respondents who work with clients who display challenging behavior (86.0%) reported receiving sufficient training to manage all (38.0%) or some (48.0%) of their client's challenging behavior. Most respondents who work with clients who display skill deficits reported receiving sufficient training to implement all (50.7%) or some (40.0%) skill acquisition plans. More than half of respondents (54.1%) reported their employer hosted internal professional development opportunities.

We asked respondents what they liked about their job training. Respondents mentioned quality of supervision practices and training:

- Good supervisory support (e.g., openness to questions or concerns, offering to help, modeling, having a high frequency of observations, and accessing ongoing training and support), or
- Access to high quality training (e.g., detailed and interactive training).

However, other respondents reported that they received little to no training prior to providing services independently.

We asked respondents what they would change about their job training. Respondents mentioned frequency, quality, and individualization or focuses of training:

- More or improved safety or crisis training
- More training prior to independent service provision
- More client-specific training
- More or improved supervision
- A greater breadth of training

Statistical Analyses

Six items were intended to measure job satisfaction, but one item from the first (BCaBA) survey was dropped due to its high cross-loading in the factor analysis. Three items assessed intentions to quit. One item was used to measure burnout. Means, standard deviations, and reliability coefficients of the dependent variables are presented in Table 3-8.

Table 3-8

Dependent Variable Measures Descriptive Statistics: RBT Survey

Variable	Mean	SD	Cronbach's α	# items
Job (dis)satisfaction	1.95	.80	.87	5
Intention to Quit	2.20	1.16	.89	3
Burnout	2.36	1.06	n/a	1

Note. SD = Standard Deviation. Skewness and kurtosis values were all below 1.0, indicating that these dependent variables were normally distributed. Cronbach's a is a measure of internal consistency.

Analysis Strategy. Unless otherwise noted, relationships between two numeric variables are examined with Pearson's Correlation (R). Relationships between a categorical variable and the outcomes of interest were examined with Multivariate Analysis of Variance (MANOVA) to compare the groups on a linear combination of the three dependent variables and avoids Type I error inflation that could be caused by running multiple ANOVAs for each dependent variable.

Hypothesis 1: Crisis management training is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Mostly supported.

Participants were asked "Did you receive training on crisis prevention and management (e.g., Professional Crisis Management; Safety Care)." Participant responded with "yes," "no," or "not sure." Any "not sure" response was treated as missing data. A one-way Multivariate Analysis of Variance (MANOVA) indicated that the overall effect of crisis management training on the combination of outcome variables (satisfaction, intent to quit, burnout) was marginally significant (Wilks' Lambda = .89, p = .056), and Partial Eta Squared was .11, indicated that 11% of the variance in outcomes is explained by crisis management training. We therefore ran follow-up ANOVAs on each dependent variable. Table 3-9 displays the means of each outcome variable by response.

Table 3-9

Did You Receive Training on Crisis Prevention and Management (e.g., Professional Crisis Management; SafetyCare)?

Dependent Variable	Response	Mean	Std. Error	CI Lower Bound	CI Upper Bound
Job (dis)satisfaction*	Yes	1.814	.117	1.580	2.049
	No	2.248	.174	1.901	2.595
Intent to quit	Yes	2.043	.171	1.703	2.384
	No	2.524	.252	2.020	3.028
Burnout*	Yes	2.130	.152	1.827	2.434
	No	2.905	.225	2.456	3.354

***Note*.** Follow-up ANOVAs indicated that the effect of crisis management training was significant for the job satisfaction and burnout variables only. CI = 95% confidence interval.

Hypothesis 2: Sufficient training in managing clients' challenging behavior is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Supported

Participants were asked "Do you believe you have received sufficient training to manage your client's [challenging] behavior?" They responded either "Yes, with all forms of [challenging] behavior," "Yes, with some forms of [challenging] behavior" or "No." MANOVA results indicate a significant multivariate effect of challenging behavior training on the combination of outcome variables (Wilks' Lambda = .77, $p < .01$, Partial Eta Squared = .12). Follow up ANOVAs indicated significant effects of challenging behavior training on each outcome variable. Outcome means for each response are displayed in Table 3-10.

Table 3-10

Responses to "Do you believe you have received sufficient training to manage your client's challenging behavior?" by Dependent Variable

Dependent Variable	Response	Mean	Std. Error	CI Lower Bound	CI Upper Bound
Job (dis)satisfaction	Yes, with all forms of CB	1.609	.159	1.291	1.927
	Yes, with some forms of CB	2.007	.127	1.753	2.261
	No	2.455	.230	1.995	2.914
Intention to quit	Yes, with all forms of CB	1.754	.225	1.304	2.203
	Yes, with some forms of CB	2.176	.180	1.816	2.535
	No	3.182	.326	2.531	3.832
Burnout	Yes, with all forms of CB	1.826	.207	1.412	2.240
	Yes, with some forms of CB	2.500	.166	2.169	2.831
	No	3.000	.300	2.401	3.599

Note. CB is shorthand for challenging behavior. Post hoc multiple comparisons (with Bonferroni adjustment) were conducted to examine whether the "yes", "some", and "all" groups differed significantly on each dependent variable. Significant mean differences include: Those who responded "No" were significantly more (dis)satisfied than those who responded "all", $p < .05$.

Those who responded "No" had significantly higher intent to quit compared to both the "some" (p < .05) and "all" (p < .05) groups. Those in the "all" group had significantly lower burnout compared to both the "some" group (p < .05) and the "no" group (p < .01). CI = 95% confidence interval.

Hypothesis 3: Job tenure is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Mostly unsupported.

Respondents reported number of years and months at their current job, and these responses combined into total months. This job tenure variable was only marginally related to burnout (R = .21, p = 09), and it was not significantly related to satisfaction or intent to quit.

Hypothesis 4: Work setting is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Unsupported.

Respondents indicated the settings in which they worked. There were only enough responses to compare those who worked in home (n = 12), clinic (n = 27), school (n = 18), and "multiple" settings (n = 9). Other responses were treated as missing data. MANOVA results indicated that the overall effect of setting was non statistically significant (Wilks' Lambda = .81, n.s., Partial Eta Squared = .069).

Hypothesis 5: RBTs currently pursuing a degree will indicate different levels of job satisfaction, intention to quit, and burnout than those not currently pursuing a degree.

Conclusion: Unsupported.

Because the distributional assumptions of the MANOVA were violated, this hypothesis was tested with a non-parametric, independent samples median test. This test indicated no significant overall effect of pursuing a degree on job satisfaction [Chi-Sq (1) = 1.59, p = .21], quit intention [Chi-Sq (1) = 0.012, p = .91], or burnout [Chi-Sq (1) = .15, p = .70].

Hypothesis 6: Gender is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Unsupported

Because there were so few men in the sample (n = 6), this comparison may not be meaningful. However, no significant overall effect of gender was indicated by the MANOVA (Wilks' Lambda = .97, p = .61).

Hypothesis 7: Race is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Unsupported

Because respondents could select multiple responses for this question, each racial category was treated as dichotomous (yes/no). However, only two of the racial categories had enough variance in responses to warrant a statistical comparison: RBTs who selected the "white" racial category (n = 35) vs. those who did not (n = 34), and RBTs who selected the "Hispanic/LantinX" category (n = 34) versus those who did not (n = 35). However, neither of these categories was significantly related to the combination of outcome variables (Wilks' Lambda = .96 for both the hite vs. nonwhite and Hispanic vs. Non-Hispanic comparisons, p =.41 and p = .45, respectively).

Hypothesis 8: Age is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Unsupported

Age (reported in years) was not significantly related to job (dis) satisfaction, intent to quit, or burnout (Pearson's R = .06, .03, and .04, respectively).

Hypothesis 9: Working conditions are related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Supported

Three items assessed working conditions, "My working conditions are clean," "I feel safe at my job," and "I have the tools needed to do my job well." Because these three items had high internal reliability (Cronbach's = .78), their responses were averaged to create the "working conditions" variable. The working conditions composite was negatively related to job (dis)satisfaction (R = .80), intent to quit (R = -.73), and burnout (R = -.53), all $p < .05$.

Hypothesis 10: Satisfaction with pay is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Supported.

This variable will be referred to as pay dissatisfaction, due to the way the responses were coded (higher numbers indicating less agreement). Pearson's correlation coefficients indicated that pay dissatisfaction is positively related to job dissatisfaction (R = .45), quit intent (R = .49), and burnout (R = .32).

Hypothesis 11: Pay predictability is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Mostly supported.

Participants were asked if their pay was predictable from week to week. Because distributional assumptions of the MANOVA were not met, this hypothesis was tested with

a non-parametric, independent samples median test. Results indicate that those whose pay is predictable from week to week were less dissatisfied [Chi-Sq (1) = 8.23, $p < .01$] and less likely to quit [Chi-sq (1) = 4.23, $p < .05$], but the groups did not differ significantly on burnout [Chi-sq (1) = 1.19, $p = .28$].

Hypothesis 12: The requirement to complete unpaid tasks outside of one's shift is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Supported.

MANOVA results indicated an overall effect of unpaid tasks on the combination of outcomes (Wilks' Lambda = .83, p < .01), and this requirement explained 17% of the variance in the combined outcomes. Table 3-11 displays the mean of each outcome variable by response.

Table 3-11

Mean outcome variables by response to the item "Does your job require you to complete unpaid work tasks outside of your shifts?"

Dependent Variable	Response	Mean	Std. Error	CI Lower Bound	CI Upper Bound
Job (dis)satisfaction*	Yes	2.400	.160	2.082	2.718
	No	1.739	.108	1.523	1.954
Intent to quit*	Yes	2.818	.233	2.354	3.282
	No	1.910	.158	1.595	2.224
Burnout*	Yes	2.909	.214	2.483	3.335
	No	2.104	.145	1.816	2.393

Note. *Follow-up ANOVAs revealed that the effect of unpaid tasks was significant for all three dependent variables. CI = confidence interval 95%.

Hypothesis 13: Access to healthcare benefits as part of the job is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Unsupported.

The multivariate effect of healthcare benefits was not statistically significant (Wilks' Lambda = .99, p = .86, Partial eta-squared = .011).

Hypothesis 14: Hours worked (Full time vs. Part-time) is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Partially supported

The multivariate effect of full vs. part-time work was significant (Wilks' Lambda = .89, $p < .05$) and explained just over 11% of the variance in the combined outcomes. Follow-up ANOVAs indicated that the effect was significant only for burnout, such that those who worked part-time ($M = 2.00$) reported significantly lower burnout than those who worked full-time ($M = 2.60$), $F(1, 69) = 5.61$, $p < .05$).

Hypothesis 15: Satisfaction with supervision is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Mostly Supported

Satisfaction with supervision was assessed from four items (e.g., "I feel like my supervisor promotes my professional development"). Because these items showed strong internal consistency (Cronbach's α = .91), they were averaged to create a composite score. This composite score was negatively related to job (dis)satisfaction ($R = -.63$), turnover intent ($R = -.57$), and burnout out ($R = -.47$), all $p < .05$).

Satisfaction with supervision was also assessed with the item "Do you believe you have sufficient supervision to complete the job?" Respondent could respond with "Yes, with all my clients," "Yes, with some of my clients," or "No." MANOVA results indicated that there was an overall effect of this sufficient supervision variable (Wilks' Lambda = .80, $p < .05$), and the effect explained just under 11% of the variance in the combined outcome variables. Follow-up ANOVAs indicate that this effect is significant for job dissatisfaction and burnout, but not significant for intent to quit. Mean levels of each outcome variable by response are presented in Table 3-12.

Table 3-12

Mean outcomes by response to the item "Do you believe you receive sufficient supervision to complete your job?"

Dependent Variable	Response	Mean	Std. Error	CI Lower Bound	CI Upper Bound
Job (dis)satisfaction	Yes, with all my clients	1.792	.107	1.579	2.005
	Yes, with some of my clients	2.127	.229	1.669	2.585
	No	2.681	.269	2.144	3.218
Intent to quit	Yes, with all my clients	2.059	.160	1.740	2.378
	Yes, with some of my clients	2.242	.344	1.556	2.929
	No	3.000	.404	2.195	3.805
Burnout	Yes, with all my clients	2.196	.139	1.918	2.474
	Yes, with some of my clients	2.273	.300	1.674	2.871
	No	3.500	.351	2.798	4.202

Note. Post hoc multiple comparisons (with Bonferroni adjustment) were conducted to examine whether the "yes," "some," and "all" groups differed significantly on each dependent variable. Significant mean differences include: Those who responded "all" had lower job (dis)satisfaction (M=1.79) compared to those who responded "no" (M=2.68). Differences are not significant for the quit intent outcome. Those who responded "all" had significantly lower burnout (M=2.20) compared

to those who responded "no" (M=3.5). Also, those who responded "some" (M=2.27) had significantly lower burnout than those who responded "no" (Mean 3.50). CI = confidence interval 95%.

Hypothesis 16: Having sufficient training to implement skill acquisition plans is related to RBT job satisfaction, intention to quit, and burnout.

Conclusion: Supported.

Respondents were asked "Do you believe you have received sufficient training to implement your client's skill acquisition plans?" They responded with "Yes, with all skill acquisition targets," "Yes, with some skill acquisition targets," or "No."

MANOVA results indicated a significant multivariate effect of this variable (Wilks' Lambda = .74, $p < .01$), and Partial Eta Squared indicated that response to this item explained just under 15% of the variance in the combined outcome variables. Follow-up ANOVAs indicate that this effect is significant for each of the three outcome variables. Mean levels of each outcome variable by response are presented in Table 3-13.

Table 3-13

Mean outcomes by response to the item "Do you believe you have received sufficient training to implement your client's skill acquisition plans?

Dependent Variable	Response	Mean	Std. Error	Lower Bound	Upper Bound
Job (dis)satisfaction	Yes, with all skill acquisition targets	1.669	.122	1.425	1.912
	Yes, with some skill acquisition targets	2.064	.136	1.792	2.337
	No	3.042	.295	2.453	3.630
Intent to quit	Yes, with all skill acquisition targets	1.867	.180	1.508	2.225

	Yes, with some skill acquisition targets	2.262	.201	1.861	2.663
	No	3.778	.434	2.912	4.644
Burnout	Yes, with all skill acquisition targets	2.171	.173	1.827	2.516
	Yes, with some skill acquisition targets	2.357	.193	1.972	2.743
	No	3.500	.417	2.667	4.333

Note. Post hoc multiple comparisons (with Bonferroni adjustment) were conducted to examine whether the "yes," "some," and "all" groups differed significantly on each dependent variable. Significant mean differences include: Those who responded "all" and those who responded "some" were both significantly lower on job (dis)satisfaction than those who responded "No." Those who responded "all" and those who responded "some" were both significantly lower on quit intent than those who responded "No". Those who responded "all" and those who responded "some" were both significantly lower on burnout than those who responded "No."

Multiple Regression Analysis. A key research question stemming from the results above is: *What are the best or most important predictors of job dissatisfaction, quit intent, and burnout?* To examine the unique contribution of each predictor, multiple regression analysis and relative weight analysis were performed on each dependent variable. Table 3-14 displays the results of the multiple regression and relative weight analysis for each outcome variable. By examining the last column, the rescaled relative weights tell us the proportion of explained variance accounted for by each predictor. Before regression analysis, variables with categorical responses in the form of "No," "Some," and "All" were transformed into a numeric scale, such that "No" received a score of 0, "Some" received a score of 1, and "All" received a score of 2. Sixteen respondents were deleted for having missing data on multiple predictors, bringing the sample size for the multiple regression and relative weight analysis to $N = 69$.

Table 3-14

Multiple Regression and Relative Weight Analysis Results: RBT Survey

Predictors	Unstd. Coeff. (B)	Std. Error	Std. Coeff. (Beta)	p	Raw Relative Weight	Rescaled Relative Weight
DV: Job (dis)satisfaction						
Crisis Management Training	0.06	0.127	0.035	0.64	0.0091	1.25
Challenging Behavior Training	0.002	0.105	0.001	0.987	0.0243	3.33
Poor Working Conditions	0.575	0.107	0.574	<.001	0.3006	41.17
Pay (dis)satisfaction	0.171	0.052	0.254	0.002	0.1001	13.71
Pay predictability	-0.008	0.127	-0.005	0.95	0.0184	2.52
Unpaid tasks	0.193	0.132	0.112	0.149	0.0602	8.25
Full-time	0.095	0.119	0.058	0.428	0.0093	1.28
Supervision satisfaction	-0.094	0.096	-0.106	0.331	0.1348	18.47
Skill acquis. plan training	-0.128	0.112	-0.103	0.255	0.0732	10.02

Total R^2			0.73		0.73	
DV: Intent to Quit						
Crisis Management Training	0.264	0.198	0.108	0.188	0.0058	0.85
Challenging Behavior Training	-0.148	0.164	-0.085	0.37	0.0381	5.56
Poor Working Conditions	0.739	0.168	0.511	<.001	0.2432	35.51
Pay (dis)satisfaction	0.288	0.081	0.296	<.001	0.1244	18.16
Pay predictability	0.214	0.199	0.088	0.287	0.04	5.84
Unpaid tasks	0.258	0.206	0.104	0.214	0.0542	7.92
Full-time	0.284	0.186	0.12	0.132	0.0235	3.43
Supervision satisfaction	-0.06	0.15	-0.046	0.692	0.1002	14.62
Skill acquis. plan training	-0.152	0.174	-0.084	0.388	0.0555	8.1
Total R^2			0.69		0.69	

Note. Total R^2 is interpreted as the proportion of variance in the dependent variable (DV) that can be explained by the set of predictors. Raw relative weight = the proportion of variance in the dependent variable that is appropriately attributed to each predictor. Rescaled relative weight = percentage of total predicted variance attributed to each predictor (raw relative weight divided by total R2). Relative weights are scaled in terms of relative effect sizes; therefore, significance tests

comparing them to zero are not provided. Predictors with the top four relative weights for each dependent variable are bolded.

Caregiver Survey Results

We received 231 survey submissions, and 82 responses were not included because of substantial missing data or because they did not report that they were caregivers to another individual. Our final sample included 149 responses. These respondents reported the individual(s) in their care were currently or would benefit from receiving behavioral services in Florida. Table 3-15 provides the demographics of our sample.

Table 3-15

Demographics of Caregivers and Individuals Cared For

Variable	n	%
Caregiver		
Type of Caregiver		
Parent	135	90.6
Grandparent	5	3.4
Sibling	4	2.7
Legal Guardian (not parent, grandparent, or sibling)	3	2
Other (caregiver or aunt)	2	1.3
Race/Ethnicity		
White, Non-Hispanic	77	51.7
White, Hispanic or Latino	59	39.6
White, Brazilian	1	<1
Black or African American	11	7.4
Multiracial	8	5.4
Asian	3	2
Native American or Pacific Islander	2	1.3
American Indian or Alaskan Native	1	<1
Preferred not to answer	9	6
Individual Receiving Services		
Age of Individual Cared for		
6 or younger	39	26.2
7 to 17	61	40.9
18 or older	49	32.9
Race/Ethnicity of Individual Cared for		
White	75	50.3
Hispanic or Latino	52	42.3
Black or African American	12	8.1
Multiracial	10	6.7
Asian	1	<1

Preferred not to answer	8	5.4
Gender		
Woman	41	27.5
Man	107	71.8
Prefer not to answer	1	<1
Language Spoken in Household		
English only	97	65.1
English and another language	49	32.9
Spanish	47	31.5
Portuguese	3	2
French or Creole	2	1.3
Location of Individual Cared for		
South Florida	93	62.4
Other	56	37.6
Disability of Individual Cared for		
ASD	123	83.7
ASD and ID	19	15.4
ASD and at least one other diagnosis	70	56.9

Status of Service Provision

Respondents reported they received an initial recommendation to pursue behavioral services from a medical provider (56.4%), family member or friend (25.5%), state support system or agency (23.5%), educator or school personnel (16.8%), or another source (9.4%). Most respondents (63.1%) indicated the individual was receiving behavioral services. These respondents reported the individual was receiving behavioral services for social skills (50.3%), language or communication (42.3%), adaptive or functional living skills (39.6%), challenging behavior (34.2%), school readiness (16.8%), academics (15.4%), caregiver training (9.4%), employment skills (3.4%), or other areas of need (4.7%). Most respondents (73.4%) reported the individual was previously on a waitlist before accessing behavioral services. The reported waitlist duration varied from up to 6 months (48.9%), between 7 and 12 months (12.8%), or over 12 months (5.3%) or unknown (6.4%). Respondents reported the individual was receiving up to 20 (57.1%), between 21 and 40 (36.3%), or more than 40 (2.2%) hours of weekly behavioral services. Most respondents (71.4%) reported the individuals always or often received their recommended weekly hours of behavioral services.

Fewer respondents (36.9%) indicated they were seeking behavioral services for the individual. These respondents reported they were seeking behavioral services for the individual for multiple reasons: social skills (26.2%), challenging behavior (24.8%), adaptive or functional living skills (22.8%), language or communication (17.4%), employment skills

(10.7%), school readiness or academics (8.7%), caregiver training (6.7%), or other areas of need (2.7%). Most of these respondents (65.5%) reported the individual was not currently on a waitlist.

Fewer respondents (34.5%) reported the individual was on a waitlist due to a lack of providers who are able or willing to work with adults with specific concerns (e.g., engages in aggression), a lack of providers working their area, a lack of qualified providers, or because they encountered barriers related to insurance. For example, one caregiver shared,

> There are too many individuals with Autism or related needs and not enough QUALIFIED ABA services available. And please note that I say QUALIFIED. I find there ARE places around that offer ABA services... for the most part they are run by qualified people .... but the people actually providing services have nothing more than a 40hr certificate .... and that is pretty much just anyone off the street in need of a job ... but not necessarily someone with the right personality, mental capacity, level of caring, and certainly some degree of experience.

> I have found from reading hundreds and hundreds of reviews that most ABA centers seem to be nothing more than a glorified daycare with ability to bill a LOT of money to insurance or Medicaid (i.e., a money-making organization) but not really providing the true ABA services to the clients. I have no proof of this, but hundreds and hundreds of reviews cannot be wrong. I feel this should be a minimum of a six-month training program with a National Level Exam to achieve certification and preferable a two-year degree. Sure, this would take a lot longer to get qualified people, but it would also add validity and value to the job title, and they could make a lot more than $15/hr while providing much needed therapy for our children ... as opposed to just babysitting them.

Type of Service Provision

The respondents reported they were seeking, or the individual was receiving (a) applied behavior analysis therapy or services (60.4%), (b) behavioral supports or services in a school setting (28.2%), (c) adult behavioral services (22.8%), or (d) an unlisted service (10.1%). Our results section was consolidated into the three types of behavioral services regardless of the individual's status of service provision to account for respondents who often reported their experiences both seeking and receiving services at different points in the individual's care. Survey submissions ended when respondents selected an unlisted service or did not select one of the three types of behavioral services (i.e., no response submitted).

ABA Therapy: Clinic, Center, or Home. For respondents who reported the individual was receiving ABA therapy or services (*n* = 90; hereafter referred to as "ABA therapy"), most reporting receiving services in their home (73.0%) and/or a clinic or center (43.2%). Most respondents reported the individual's ABA therapy was funded by commercial insurance (49.2%) or private pay (34.4%). Fewer respondents reported the individual's ABA therapy was funded by Medicaid (29.5%) or other state or federal funds (3.3%). Nearly half of the respondents (49.1%) who reported the individual was currently receiving ABA therapy indicated that they experienced obstacles during the service enrollment process. Most respondents (80%) who reported they are seeking services reported currently experiencing obstacles to enrolling the individual in ABA therapy. Most respondents (65.5%) reported experiencing unplanned service disruptions while receiving ABA therapy. For caregivers who were able to access support for enrolling, the most common sources of support included the CARD, Early Steps, insurance, or other healthcare providers. Other caregivers reported that they were unable to access support in finding services and did so independently.

Behavioral Supports or Services: School. Respondents who reported receiving school services (*n* = 42) reported the individuals had one or multiple school-based exceptionalities: ASD (78.4%), developmental delay (21.6%), language impairment (18.9%), emotional/behavioral disability (13.5%), intellectual disability (13.5%), speech impairment (13.5%), other health impairment (8.1%), unlisted (8.1%; e.g., epilepsy, 5.4%), gifted (8.1%), specific learning disability (5.4%), dual sensory impairment (5.4%), deaf or hard-of-hearing (2.7%), homebound or hospitalized (2.7%), orthopedic impairment (2.7%), traumatic brain injury (2.7%), or visual impairment (2.7%).

Most respondents reported the individual attended a public (42.1%), private (26.3%), or private specialized behavior (13.2%) school. Fewer than half of respondents reported the individual's behavioral challenges resulted in a more restrictive school (23.3%), classroom (10.0%), or other (6.7%) placement. More than half of respondents (57.5%) reported the individual had an individualized education plan and behavioral intervention plan or 504 plan that was implemented by a classroom teacher (59.1%), classroom personnel (45.5%), behavior therapist (40.9%), or behavior analyst (36.4%). Respondents strongly agreed or agreed (45.0%), neither agreed nor disagreed (25.0%), or disagreed or strongly disagreed (30.0%) that they were satisfied with the behavioral services the individual was receiving at school.

Half of respondents (n = 10) reported limited access to behavioral services in school has impacted their family's quality of life. Most respondents (n = 28) reported the individual had access to other services provided by the school (35.7%) or externally funded (39.3%) staff. Fewer than half of respondents (n = 10) reported experiencing obstacles accessing behavioral support among individuals currently receiving behavioral services in school (40%). Half of the respondents (n = 20) seeking behavioral support for the individual

reported experiencing obstacles to accessing behavioral services in school. Most respondents (n = 19) reported not experiencing unplanned service disruptions among individuals currently receiving behavioral services in school (63.2%).

Adult Behavioral Services and Placements Funded by the Agency for Persons with Disabilities (APD). For respondents who reported seeking or receiving APD services (*n* = 34), most reported that the individual resided in their own or a family home (75%). All respondents reported they had not initiated the group home placement process. Most respondents (n = 13) reported the individual received behavioral services in their own or a family home (61.5%). Fewer respondents reported the individual received behavioral services in the community (38.5%), day treatment or life skills facility (23.1%), group home (15.4%), support living setting (7.7%), or another setting (15.4%). Most respondents (84.6%) reported the individual's behavioral services were funded by other state or federal funding. Some respondents (23.1%) reported the individual's behavioral services were funded by commercial insurance.

Caregivers Experience Several Obstacles to Accessing Consistent, High-Quality Services

Finding and Establishing Services. Common obstacles to enrolling or seeking to enroll individuals in services included being waitlisted, having difficulties with insurance, therapist shortage or availability, and difficulty completing documentation or accessing information. When asked to share other aspects of their experience receiving ABA services, multiple caregivers discussed their difficulties in obtaining services. One respondent expressed in their search for services that *"It is absolutely impossible unless you have time and resources dedicated to this process. Many people do not have the ability to do this without help."* Another caregiver described the process of finding services as *"challenging"* and *"tedious,"* whereas another described feeling *"lost"* in the beginning. One caregiver suggested,

> There needs to be an easier way for parents to find providers AND agencies need to find a way around RBTs picking and choosing convenient hours for them and working more around the hours of the client.

Some caregivers seeking school services also reported a lack of responsiveness from the school or administration, causing delays in accessing service. Two caregivers stated that despite speaking with school personnel about the individual in their care needing accommodation, they were not provided. One caregiver stated,

> The way that the system is structured is you have to fail (or have a significant issue) before you are awarded services in regard to behavior. I had asked from kindergarten up to 5th grade for an FBA and was told

> there wasn't a need. My son was awarded counseling services last year after a threat assessment was conducted. Which ultimately led to improvement which proved my point that it could have been implemented sooner with a better outcome.

Caregivers also reported that there is a lack of access to therapists in schools (e.g., general shortage or schools did not allow or accept therapists). In addition, many caregivers reported that they had a lapse of services during the pandemic due to company policies limiting in-person contact.

Some caregivers reported that having limited access to behavioral services negatively impacted their quality of life. For example, one caregiver reported that they or their spouse had to quit their job to provide care, whereas another caregiver reported that a lack of services *"delayed [their] son's development of social, independent living, and employment skills, which are all essential as he is about to age out of the school system."* Similarly, some caregivers reported that the individual in their care was limited academically and socially or that they struggled with challenging behavior.

Therapist Shortage, Availability, Turnover & Service Quality. The most common obstacle to service enrollment and unplanned service disruptions was therapist shortage, availability, or turnover. Several caregivers reported experiencing issues with clinics not having enough therapists or that the therapists' availability did not match their own. For caregivers seeking or receiving APD services, many reported that there is a lack of clinics, facilities, or therapists who will provide services to adolescents and adults. Regarding being on waitlists, some caregivers stated that they could not find a clinic with enough staff to enroll the individual in their care, with one individual being on a waitlist for 12 years. Another caregiver reported calling five different agencies to access care, but they still remained on waitlists.

Furthermore, caregivers' reports suggested that they experienced compounding obstacles to enrolling in or continuing ABA services. For example, one respondent stated,

> [We were] waitlist for about 3 months [due to] scheduling conflicts [and a] lack of ABA therapists, constant changes in staff due to shortage and RBTs leaving to another state after the pandemic, [and] availability to get in person therapy… Some therapists were determined that online therapy would have been best but [didn't realize] it required more manpower from our family to shadow my child during therapy which can create a strain on the rest of our children and our family overall.

Another respondent stated,

> It's a broken system. One, there is always going to be a shortage until they are paid better. It's similar to veterinary medicine with vet techs. They are talented, young, caring people who are underpaid. They will either finish school and move up or leave the industry. This is not beneficial to the child to have a new therapist every few months.

Beyond a general lack of therapists, some caregivers specifically reported that there is a lack of qualified therapists. For example, one caregiver reported that the ABA services they received in Florida were of significantly lower quality than the services they received in the Northeast. For caregivers accessing or considering ADP services, most did not initiate the process of finding a group home placement due to concerns about the quality of services. One respondent said that they "don't want [their] son to ever be in a group home, as I know firsthand what happens in them." Other caregivers generally reported that they would like the individual in their care to stay with them as long as possible, with some specifying that they would receive better services at home.

Difficulties With Insurance or Funding. Caregivers reported experiencing delays in insurance approval, encountering a lack of coverage for services, or general difficulty getting their hours approved. Multiple caregivers reported that they experienced difficulties obtaining coverage for older individuals (e.g., teenagers or adults), or finding providers willing to treat them. One respondent stated,

> Most children and adults with autism need some sort of behavioral therapy and a good portion of these children and adults cannot afford (nor can their families) private insurance and they depend on Medicaid received through their Social Security disability to cover these expenses, but most ABA therapy and other behavioral therapies do not accept Medicaid.

Another caregiver stated, "As a mom of a child with special needs, there is just so much and fighting with insurance [companies]. [That just] isn't where I want to spend my time." One caregiver stated,

> Insurance simply doesn't care. It's dollars and cents to them. I realize there may be people who abuse the system, but children who really, truly need services are left waiting or never receive therapy. Insurance is constantly trying to cut coverage.

In addition, multiple caregivers reported that they have had to pay out of pocket for ABA therapy or that they suddenly lost insurance coverage. For example, one caregiver reported experiencing disruptions "while changing insurance, or we've had to pay privately, reduce hours or do significant budget adjustments to continue with services."

Other caregivers reported being waitlisted because insurance (e.g., MedWaiver) had yet to approve their assessment.

Benefits of Services

Despite experiencing multiple barriers to accessing services and experiencing unplanned disruptions, some respondents also reported seeing the benefits of ABA services, including improved communication and social skills, decreased challenging behavior, skill acquisition, gaining independence, smoother transitions, and seeing improved self-regulation. For example, one caregiver shared,

> My boys (9 and 11 years old) have made great gains in social aspects as well as calm-down strategies and overall acceptance at school. We have come up with many plans of action, reward systems, and have been able to evolve with their needs thanks to having one consistent BCBA since they were in pre-k.

Caregivers who accessed services in school reported that ABA services allowed the individual in their care to perform better in class, cooperate with classroom routines and expectations, and interact with their peers. One caregiver whose son was in a group home shared,

> [he learned] to live as an adult outside of [his] parent's home. Caring for all night and all-day needs sent my husband into a right coronary 100% blockage that could have been a widow maker. Afterwards, he couldn't continue [caregiving], and our son needed to find medically necessary continuation of care.

This example shows how accessing services can benefit both the individual receiving services and the loved ones of that individual. Others reported that they had yet to see the benefits of ABA services due to poor service quality or inconsistencies in service provision.

Part 4: Conclusions and Recommendations

Our findings reveal that Florida experiences a high turnover of behavioral providers at all levels due to a myriad of reasons including a) inadequate training and supervision, b) lack of diversity among training opportunities, c) poor working conditions, and d) systemic barriers. We identified a disparity between the behavioral service needs of Florida families and the availability of behavior analytic service providers. Specifically, we found that the age of clients that the majority of behavioral service providers report working with is disproportionate with the age ranges and clinical focus of individuals who are in need of services (see Figure 1-1, Figure 3-1, and Figure 3-2). Additionally, we found that pre-certification training opportunities are often limited in scope or clinical focus, which directly impacts behavioral service providers' capacity to serve individuals with complex and challenging behavior needs across the lifespan. Collectively, these training and service provision limitations have resulted in a) clients with unmet needs across the lifespan, b) requisite out-of-state service referrals for clients requiring specialized care, and c) providers remaining in difficult work situations that lead to turnover or choosing to work with less challenging populations. Many of the variables that have been identified as impacting the availability and quality of behavioral service providers in the state of Florida are dynamic and interactive. That is, the lack of high-quality behavioral services and systems for underserved clinical populations impacts the training opportunities in graduate programs and community agencies, which in turn results in decreased availability of qualified providers for underserved clinical populations who require specialized care.

Thus, our recommendations are related to increasing the scope and capacity of behavioral service provision in Florida, particularly for individuals who exhibit challenging behavior by a) developing clinical and training systems to increase the capacity of the behavior analysis workforce to provide services that are representative of and responsive to the behavioral service needs of individuals in the state, and b) developing training systems that can be disseminated across university and community training programs that result in self-sustaining, high-quality training of behavior analysis service providers skilled to work with individuals with developmental disabilities across the lifespan. Finally, we suggest potential solutions to systemic barriers that impact accessing behavioral services in the state of Florida, broadly.

In this section, we provide several short- and long-term recommendations based on the findings reported in this project. We plan and have the capacity to address a subset of these recommendations in coordination with the FDDC. Additionally, we propose and highlight recommendations for potential solutions to systemic barriers that will require the engagement of additional stakeholders such as FABA, state-wide advocacy groups, and other state agencies. Recommendations 1 – 5 are focused recommendations with a subset

of aims that are tied to our upcoming action steps and work plan. Recommendations 6 - 7 are broader recommendations that are informed by the results of our collective findings.

Recommendation 1: *Develop a system to establish Florida-based centers and providers with expertise in the assessment, treatment, and management of challenging behavior.*

The lack of Florida-based centers that provide focused behavioral intervention in the assessment and treatment of challenging behavior impacts both access to adequate services and training of qualified providers. Our primary recommendation and ultimate goal in this aim is to obtain state and/or federal funding to create a hub and spoke model with 2-3 intensive outpatient, inpatient, and / or residential facilities that serve clients with severe challenging behavior that can accept referrals (i.e., serve Florida families) and serve as training sites (i.e., train Florida behavioral service providers) to simultaneously meet the clinical and training needs in the state and enhance the skills of providers throughout Florida.

- Our team's proposed work toward this goal includes:
    - Develop a strategic plan for recruiting and retaining behavior therapists in Florida based on our findings.
    - Develop and pilot training for BCBAs and RBTs to treat challenging behavior across Florida.
        - Establish an internship program for lead behavior analysts to expand the number of trained providers in the state.
        - Expand behavior technician training for challenging behavior to better serve clients and position providers to be more successful in their clinical work.
    - Establish a center(s) of excellence in Florida that can serve clients with severe challenging behavior and train staff.
- Additional systemic recommendations include:
    - Assess the resources available in other successful systems to support individuals receiving access to medical and educational services. For example, other states receive funding from both the school districts and insurance to support placement in a school program aimed at severe challenging behavior (e.g., New England Center for Children, Melmark Institute).
    - Incentivize and support collaborative partnerships with programs that are serving these populations well to increase the capacity of those programs and enhance funding possibilities. For example, Florida-based hospitals can partner with established programs providing behavioral services in inpatient settings.

Recommendation 2: *Expand undergraduate and graduate training opportunities in Florida to expose students to diverse and underserved clinical populations and further develop their clinical and professional skills.*

Undergraduate and graduate programs serve as the foundation of training for behavior analysts. Florida has multiple programs offered across universities spanning online, brick-and-mortar, and hybrid modalities. Despite the number and strength of the programs, and the diverse range of faculty expertise across the state, training opportunities across the programs are limited in scope. Our primary recommendation and goal in this area is to establish a consortium of Florida universities to facilitate resource sharing and the development of specialized training programs to serve diverse populations.

- Our teams' proposed work toward this goal includes:
    - Create a strategic plan that establishes student interest and experiences with diverse populations and client concerns.
    - Curate and disseminate best practices for practicum design across university training programs.
    - Facilitate dissemination of a shared list of competencies and implementation recommendations to avoid duplicate efforts and maximize effectiveness across the state.
    - Work with FABA and other local associations to offer targeted workshops and other forms of guidance for new professionals to gain practical skills and robust clinical repertoires.
    - Develop and disseminate training for faculty, clinical personnel, and graduate students on designing clinically relevant research and projects.
- Additional systemic recommendations include:
    - Provide graduate students with coursework and practical training on administrative tasks (e.g., billing), client advocacy (e.g., navigating insurance plans), and professional skills (e.g., cultural humility) necessary to meet the needs of individuals with complex behavioral concerns.
    - Expand availability of and access to undergraduate-level coursework and practical training experiences with diverse populations to facilitate eligibility for bachelors-level certification.
    - Support billing practices that favor participation of BCaBAs in clinical care to expand the number of eligible service providers and leverage the relatively larger number of BCaBAs in the state (Table 1-10).
    - Encourage universities to develop and offer micro-credentials for specialized skills such as managing challenging behavior (e.g., self-injury, feeding difficulties), and school consultation.

Recommendation 3: *Establish a system for disseminating best practice standards in supervision to improve supervision practices in the state of Florida.*

Supervision practices vary widely across university programs and clinical sites. Some university training programs have developed a process for assessing competencies, resulting in important but redundant work. Because the vast majority of clinical sites offer primarily early intervention and skill acquisition services, supervision and training opportunities for other populations (e.g., adults), settings (e.g., schools, hospitals), and areas of clinical focus (e.g., challenging behavior, feeding disorders) are limited. Additionally, there is a lack of emphasis on developing supervisor skills across multiple areas of competency in university- and clinic-based training programs. Thus, in addition to the recommendations above related to expanding the scope and capacity of clinical and educational systems, we recommend focused efforts to improve the quality of supervision practices for RBTs, trainees, and early-career BCBAs across the state. Our primary recommendation in this aim is to establish clear guidance for academic training programs and behavioral providers on best practices in supervision.

- Our teams' proposed work toward this goal includes:
    - Evaluate and establish best practices for supervision in collaboration with academic programs and clinical supervisors to create a shared resource list for clinical supervision.
    - Establish a standardized list of competency and assessment strategies to improve the quality of supervision of clinical skills.
- Additional systemic recommendations include:
    - Create and provide access to training beyond the required 8-hour BACB supervision course to recently certified behavior analysts to improve and support supervisory practices over time.
    - Work in collaboration with FABA to establish a mentorship network to support supervision and training in specialty areas to increase clinical capacity across the state.
    - Establish university-based ongoing training or micro-credentialing courses for supervision.

Recommendation 4: *Support the development of specialized, multidisciplinary inpatient and /or residential placements to effectively and safely serve individuals with high behavioral and medical needs.*

There are limited resources available for individuals in Florida who have a developmental disability and display severe challenging behavior or present with other unique behavioral needs (e.g., pediatric feeding disorders, dual diagnoses, complex medical needs). In addition to, or coordination with, the earlier recommendation for developing a hub-and-spoke model of intensive behavioral services and training, there is also a need for more residential and/or inpatient placements that have the capacity to serve individuals with complex behavioral and medical needs. At present, there are approximately 15 hospital-based (total including both inpatient and outpatient) programs in the United States

focused on treating severe behavior disorders and none in Florida. Overall, the United States suffers from a lack of hospital-based programs that provide best-practice, evidence-based care to the most acute cases displaying severe challenging behavior. We recommend focused, statewide support to establishing inpatient or residential programs that serve individuals with complex behavioral needs.

- Our teams' proposed work toward this goal includes:
    - Engaging with leadership from established out-of-state programs to consult on development and sustainability of specialty programs.
    - Further identify systemic barriers to development and execution of these programs (i.e., limited funding streams, legal or statutory limitations).
    - Identify ways to support the development of specialty programs that are: a) focused on intensive challenging behavior in the medical or psychiatric inpatient settings or in residential settings, b) behavior analytic focused within a multidisciplinary model, and c) resourced to provide training (e.g., involve university collaborations with supportive funding).
- Additional systemic recommendations include:
    - Advocacy regarding barriers to inpatient crisis placements, such as laws surrounding the Baker Act which are intended to protect individuals with developmental disabilities but may actually present barriers to supporting the most acute cases.

Recommendation 5: *Support providers in improving working conditions to aid in behavior therapist retention, engagement, and quality service delivery.*

Results of focus groups and surveys showed that working conditions vary widely across sites, with several sites lacking basic practices to support employee retention and satisfaction. Employees are experiencing burnout at high rates, exacerbating the shortage. Further, ABA clinics need more support and resources for managing client and employee safety, particularly during challenging behavior. Research is needed to identify best practices for establishing supportive, safe, and satisfying working conditions in ABA clinical settings.

Our teams' proposed work toward this goal includes:

- Conduct a case study with medium-sized providers (e.g., serving 30-50 clients) with high employee turnover to identify causes of turnover and pilot solutions that can later be manualized to support organizations across the state.
- Identify existing and develop new training programs for reducing staff burnout and injuries that can be disseminated to individuals in clinical leadership positions.
- Develop recommendations for behavior technician job structure to facilitate job satisfaction and reduce burnout based on existing research literature.

Additional systemic recommendations include:

- Incentivize and improve widespread accessibility to crisis management training for behavior technicians and other paraprofessionals.
- Include overview of navigating relevant healthcare systems in graduate training programs (e.g., Early Steps, IEP process, AHCA / Medicaid).
- Include strategies for managing burnout in undergraduate and graduate training programs.
- Establish operational guidelines that are based on Florida business standards and are consistent with behavior-analytic best practice standards for clinical entrepreneurs establishing new practices in Florida.

Recommendation 6: *Increase capacity for serving the growing and complex adult population.*

The APD wait list for services and the aging population identified through the CARD constituent data suggest that Florida will soon be in a position to care for many more adults with developmental disabilities than the system is currently able to support. Service providers who work with these individuals could benefit from training on multidisciplinary care, supervision, and how to maintain and support high quality staff. Some of these clinical aims can be met through Recommendations 1-3 which aim to improve the scope of clinical training opportunities in the state. However, there are broader systemic barriers related to APD processes (e.g., reimbursement rates, billing process, complex coordination, long waitlists) that require state-level intervention. Thus, our recommendations to address the unmet needs of and increase capacity to serve the growing adult population are largely systemic.

Systemic recommendations include:

- Continued coordination with APD, FABA, and relevant state organizations to focus on identifying and resolving barriers to service provision in the adult population (e.g., cumbersome billing practices, improved rates).
- Coordinate with training programs to develop contingencies to support and establish practicum sites in adult populations to increase the number of providers with experience with this population.
- Continue to support existing systems that have a track record of being effective and engaging the adult population (e.g., CARD centers provide consultation and support across the lifespan and can provide one context for exposure to these populations).

Recommendation 7: *Increase transparency of, support with, and efficiency of navigating systems to access behavioral services for caregivers of individuals with developmental disabilities across the lifespan.*

Caregivers reported difficulty with a) identifying appropriate services, b) getting timely access to services, and c) delays, interruption, or other disruptions in services that were a result of funding or reimbursement coverage (e.g., long waitlists for insurance mandated diagnostic assessments result in delayed access to intervention). Providers identified parallel barriers to providing services according to best-practice standards due to funder-imposed limitations and guidelines (e.g., nonconcurrent billing during required supervision; low reimbursement rates that affect the ability to support non-billable activities such as training, note writing). Thus, our recommendations for this aim are also largely systemic.

Systemic recommendations include:

- Encourage local Early Steps programs to include ABA services in their early intervention regardless of the status of comprehensive diagnostic evaluations so that children can begin to receive behavioral intervention during developmentally critical periods while waiting for the CDE to access more intensive and comprehensive behavioral intervention.
- Seek out and support initiatives aimed at the development of more diagnosticians and more providers able to complete a comprehensive diagnosis measuring adaptive functioning to decrease the wait period and decrease delay to services.
- Expand parent coaching initiatives and programs to support behavioral and developmental goals of children waiting for diagnostic evaluations.
- Work with advocacy groups, legislators, state organizations (e.g., FABA), providers, caregivers, and other relevant stakeholders to continue to advocate for responsive legal and business practices on issues related to concurrent billing, reimbursement for BCaBAs, and rates that support the services provided.

In closing, Florida offers a strong foundation for behavioral services that can be built upon and leveraged to expand access to services and quality of care across the state. Significant expertise exists across Florida universities and within service providers, and that expertise can be harnessed through collaborations and additional resources to improve provider training and specialized services in high need areas (e.g., addressing challenging behavior, adult services). Improved services will also require efforts to bolster working conditions and funding for providers to reduce turnover and burnout. The behavior therapist shortage is not unique to Florida (Critchfield, 2023), but the solutions must be sensitive to Florida systems and Florida families. The recommendations provided in this report offer a clear path for reducing the behavior therapist shortage in Florida and improving the quality of life of individuals with intellectual and developmental disabilities and their families. It is time to take action.

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Appendix A

Examples of State-Funded Initiatives to Support Behavior Therapist Training

Texas - The state of Texas has a number of funding mechanisms for individuals with autism. In 2015 the Texas Higher Education Coordinating Board, Autism Grants Program established three target areas. Funding is allocated to parent training; teachers/paraprofessionals training; and funding for research, development, and evaluation of treatment models. Applications for these funding mechanisms are available to the university-based settings to enhance the quality and the training. Colleagues at the University of Houston Clearlake are the recipients of the teacher/paraprofessional funding line. More information:

https://www.highered.texas.gov/our-work/supporting-our-institutions/institutional-grant-opportunities/autism-grant-program/

An additional program in Texas is the HHS Children's Autism Program which provides focused ABA services through local community agencies and organizations, including university-based clinics. It is a program that funds focused treatment, limited to 180 hours per year and a maximum of 720 hours during the child's lifetime. More information: https://www.hhs.texas.gov/services/disability/autism

Wisconsin - in 2022, Marquette University received a $2 million grant from the Wisconsin Department of Health as part of a program to expand and diversify the home- and community-based services workforce. As part of the program, they also hope to develop provider skills related to culturally responsive practices and telehealth (which improves access for remote communities). More information: https://www.marquette.edu/news-center/2022/behavior-analysis-program-receives-2-million-from-state-of-wisconsin-to-expand-medicaids-hcbs-workforce.php

Michigan: Western Michigan University's Autism Center of Excellence was awarded two grants from the Michigan Department of Health and Human services to support several initiatives aimed at improving quality of and access to services. More information: https://wmuace.com/about

Iowa - In 2016, The Iowa Department of Education launched a contract with Drake University to cover student tuition if they agreed to remain in the state and practice for 3 years following graduation. The goal was to increase the availability of services in the state. The initial contract was for $231,621.99.