










Regulation of Behavior Analysis in 15 Countries of Latin America: Assessing the Challenges and Opportunities for Implementation of the Science

Mariana de los Santos¹  · Varsovia Hernández Eslava^{2,21}  · Miguel Ávila³ · Estefanía C. Alarcón Moya^{4,5}  · Carola Scolari⁶ · Gabriella Ulloa⁷ · Corina Jimenez-Gomez⁸  · Diana Febres Cordero⁹ · Valeria Parejo¹⁰ · Mapy Chavez-Askins¹¹ · Grisel Pezzotti¹² · Diana Vergara¹³ · Beatriz Urcuyo¹⁴ · Luis Rafael Argueta¹⁴ · Jessie Arroyave Tefel¹⁵ · Rosita Morhaim Esquenazi de Sfadia¹⁶  · Ethel I. Ríos Arroyo¹⁷  · Yaniz C. Padilla Dalmau¹⁸  · Monica Gilbert¹⁹ · Alejandra Rodríguez²⁰

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Abstract

Behavior analysis is an emerging field of practice across the world. However, a lack of global standardization has led to disparities in the quality and scope of practice in different countries. In Latin America, the field of behavior analysis is still relatively new, and the issue of regulation has been a significant challenge for professionals seeking to establish and expand their practice. This paper provides an overview of the current situation in the regulation of behavior analysis in 15 Latin American countries, examining each country's regulations, laws, and coverage, and identifying the challenges and opportunities for implementing and enforcing behavior analysis practices. By identifying these challenges and opportunities, this paper seeks to contribute to the ongoing efforts of behavior analysts in Latin America to establish a robust and sustainable framework for the regulation of behavior analysis.

Keywords Latin America · Applied Behavior Analysis · Dissemination · Regulation

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✉ Varsovia Hernández Eslava
arahernandez02@uv.mx

- ¹ Universidad Veracruzana, Psychological Research Institute, Xalapa, Veracruz, México
- ² Biomedical Research Center, Universidad Veracruzana, Xalapa, Veracruz, México
- ³ Essential for Living, Orlando, FL, USA
- ⁴ CeABA, Santiago, Chile
- ⁵ Florida Institute of Technology, Melbourne, FL, USA
- ⁶ Casita ABA, Buenos Aires, Argentina
- ⁷ DAXTA, Alexandria, VI, USA
- ⁸ University of Florida, Gainesville, FL, USA
- ⁹ Conduit Ecuador, Guayaquil, Ecuador
- ¹⁰ The Behavior Web, New York, NY, USA

Behavior analysis has gained recognition as an effective applied science for a wide range of socially significant behaviors specifically in autism spectrum disorder (ASD) interventions (Hume et al., 2021). Despite this recognition,

- ¹¹ Alcanzando Inc, Naples, FL, USA
- ¹² Centro AICET, Santo Domingo, República Dominicana
- ¹³ Diversidad, Cartagena, Colombia
- ¹⁴ Centro de Intervención Edu-Terapéutico, Managua, Nicaragua
- ¹⁵ CIMA Ciudad de Guatemala, Guatemala, Guatemala
- ¹⁶ Behavior Journey, Ciudad de Panamá, Panamá
- ¹⁷ SER de Puerto Rico, San Juan, Costa Rica
- ¹⁸ Flamboyán Behavioral Services, San Juan, Costa Rica
- ¹⁹ Crystal Minds New Beginning, Miami, FL, USA
- ²⁰ Crecer Psicología y Salud, Santa Ana, San José, Costa Rica
- ²¹ Centro de Investigaciones Biomédicas. Dr. Luis Castelazo Ayala S/N, Col. Industrial, De Las Animas, C.P. 91190 Xalapa-Enríquez, Ver, México

the regulation of behavior analysis as a profession remains limited in many parts of the world (Keenan et al., 2022), including Latin America which accounts for 8.2% of the global population, comprising a total of 662 million individuals (Economic Commission for Latin America and the Caribbean, 2022).

Several authors have discussed the importance of regulating behavior analysis to support competent practice, protect consumers, and promote ethical conduct (Broadhead et al., 2018; Dorsey et al., 2009; Green & Johnston, 2009). Since 1968, Baer et al. emphasized the importance of incorporating seven foundational dimensions to enhance the quality of applied behavior analysis, underscoring the need for standardized training and credentialing to promote consistent and effective implementation. Later, Lovaas (1987) highlighted the need for methodological rigor, with findings underscoring the importance of thorough training and practical experience for practitioners to replicate successful treatment outcomes and protect vulnerable populations, such as individuals with developmental disabilities. Also, Cooper et al. (2019) described the role of behavior analysts in promoting socially significant behavior change and the need for responsible and ethical practice. More recently, Bailey and Burch (2011) and Dixon et al. (2016) discussed the ethical responsibilities of behavior analysts and the need for regulatory bodies to enforce ethical standards and improve outcomes in ABA consumers. The higher the number of behavior analysts, the higher the need for quality supervision that includes ethical decision-making (LeBlanc & Luiselli, 2016). University programs that aim to train behavior analysts should do it in an integral way including quality courses that are based on the latest Behavior Analyst Certification Board (BACB®) standards like the one described by Martínez-Díaz and Wilder (2016), who provided a historical overview of the development of a graduate program in behavior analysis in Florida, highlighting the importance of comprehensive and up-to-date training. Other authors (Catania et al., 2000) have also described how a graduate program in behavior analysis was developed, focusing on a collaboration between the university and departments specialized in providing behavioral services. These examples highlight the importance of training behavior analysts from an academic perspective, but also aiming to help them generalize the skills learned in the real world, always focused on protecting the consumers. The American Psychological Association (APA, 2016) also called for greater accountability and responsibility among psychologists, including the need for regulation and oversight of their practice. In the field of behavior analysis, Sellers et al. (2016) highlighted the importance of promoting ethical decision-making among practitioners. Furthermore, critical to international development, Sellers et al. (2020) emphasized the significance of considering differences among nations' laws when establishing behavior analysis infrastructure. Broadhead

et al. (2018) similarly stressed the importance of addressing both the scope of practice and the scope of competence among behavior analysts, proposing specific criteria for self-assessment to assist professionals in evaluating their scope of competence.

As 72% of certified behavior analysts practice in the field of autism spectrum disorders treatment (BACB, 2023), it is important to highlight a few key facts. Limited ASD research in under-resourced communities is a contributing factor to global disparities in obtaining essential services and support for individuals with ASD and their families. This issue is particularly concerning, as such research is linked to capacity-building through the training of professionals and service providers, thereby hindering access to evidence-based services (Durkin et al., 2015). A study conducted across multiple Latin American countries involving 2942 parents who are caregivers of individuals with ASD, found that inadequate infrastructure, including issues such as lengthy waiting lists, high costs, and lack of specialized services, was the primary obstacle to accessing care for individuals with ASD (Paula et al., 2020). With this said, it is crucial that regulation of behavior analysis takes place in Latin American countries so that vulnerable populations such as those with ASD can have a better chance to obtain services from practitioners with appropriate education, training, and experience in applied behavior analysis (ABA).

In Latin America, the regulation of behavior analysis as an independent profession is still in its early stages. The recent announcement by the BACB stating the suspension of certification to countries beyond the United States, Canada, Australia, and the United Kingdom (BACB, 2019) has posed a challenge for behavior analysts in Latin American countries. In response to this announcement, certified behavior analysts with the BACB and professionals from Latin America who aspired to become certified behavior analysts have applied to other international certification boards such as International Behavior Analysis Organization (IBAO®) and Qualified Applied Behavior Analysis Credentialing Board (QABA®).¹ These alternative credentialing boards

¹ The Behavior Analysis Certification Board (BACB) is a national certifying entity in the field of behavior analysis. The credentials the BACB has developed and oversees include: Registered Behavior Technician (RBT), Board Certified Assistant Behavior Analyst (BCaBA), Board Certified Behavior Analyst (BCBA), and Doctoral-level Board Certified Behavior Analyst (BCBA-D). The Qualified Applied Behavior Analysis Credentialing Board (QABA) is an internationally accredited credentialing agency. Their credentials include: Applied Behavior Analysis Technician (ABAT), Qualified Autism Service Practitioner-Supervisor (QASP-S), and Qualified Behavior Analyst (QBA). The International Behavior Analysis Organization (IBAO) is a certifying entity at the global level. Their credentials include: International Behavior Therapist (IBT) and International Behavior Analyst (IBA).

aim to continue establishing educational and experiential standards for aspiring behavior analysts worldwide (IBAO, 2024; QABA, 2024). However, these agencies may face challenges similar to those that resulted in the BACB's decision to discontinue their international scope, such as the lack of recognition of certification standards for the practice of behavior analysis by local regulation entities in each country, or the difficulties in translating subject matter content and testing questions into different languages and making them appropriate for different cultures.

In efforts to promote behavior analysis recognition across Europe, Keenan et al. (2020) provided a snapshot of the state of affairs of behavior analysis in 21 countries. Following a similar approach, the present article aims to provide an overview of the current state of behavior analysis regulation in 15 out of 33 Latin American countries, including Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Mexico, Nicaragua, Panama, Peru, Puerto Rico, and Venezuela. It is worth noting that all of the authors of this paper have personal connections to the countries discussed. Most authors are natives of the countries included in this study, while others have worked extensively in these regions. Furthermore, several authors are pioneers of behavior analysis in their respective countries, some being the only Board Certified Behavior Analysts (BCBA) in their countries (see Table 1). This underscores the limited availability of behavior analysis services in Latin America and highlights the critical need for higher quality services. Despite these challenges, the authors are committed to advancing the field of behavior analysis in their region through active dissemination of knowledge, advocacy for evidence-based practices, and collaboration with local and international organizations and professionals.

To establish a common framework related to the practice of behavior analysis, the contributors representing each country based their descriptions on a list of eight questions (see Appendix).² The topics include: (1) the recognition of the profession of behavior analyst, (2) laws protecting individuals receiving ABA services, (3) funding allocated for behavior analysis services, (4) types of services provided by behavior analysts, (5) guidelines for practitioners specific to each country, (6) available training programs, (7) professional organizations, and (8) plans for the future development of the practice of behavior analysis. Any countries not included in this report were omitted because either no representative was found through the BACB registry, or a direct connection could not be established. Unlike Keenan et al. (2020), this article does not originate from a formal project to establish common

Table 1 Number of active awarded certifications on international credentialing boards

Country/territory	BACB	IBAO	QABA	Total by country ^a
Argentina	3	2	0	5
Brazil	61	18	44	123
Chile	9	4	0	13
Colombia	4	0	0	4
Costa Rica	1	0	0	1
Cuba	NR	0	0	0
Dominican Republic	11	0	0	11
Ecuador	5	2	5	12
Guatemala	3	0	1	4
Mexico	14	4	1	19
Nicaragua	1	0	0	1
Panama	4	0	1	5
Peru	5	3	2	10
Puerto Rico ^b	64	1	1	66
Venezuela	1	0	0	1
Total by credentialing board	186	34	55	

Cuba does not appear as a search option on the BACB website. *NR* Not reported.

^a It is possible for an individual to hold multiple certifications simultaneously, either within the same board or across different boards, which could lead to an overestimation of the number of certified individuals within a country.

^b Puerto Rico listed as a U.S. Territory

standards across countries or regions. Instead, the present paper aims to disseminate local efforts and relevant information that could serve others in Latin America or other regions in promoting and advocating for ethical and professional standards and regulations in their geographical locations..

In the following sections of this paper, we will delve into the specific details of each of the 15 Latin American countries examined in the context of the regulatory landscape of behavior analysis. Several salient observations emerge as commonalities across these nations, where despite the prevalence of ABA services in some regions, there exists a notable absence of recognition for Behavior Analysis as an independent profession. Interestingly, ABA services are indeed implemented in Latin America; however, a critical distinction lies in the fact that these services are not uniformly delivered by certified behavior analysts. This amplifies the complexity of the regulatory environment, as practitioners engaged in ABA in these countries often operate within a professional framework dictated by codes of ethics associated with their respective disciplines (e.g., speech-language pathology, psychology, occupational therapy), and without an ethics code specific for behavior analysts. In addition, only a few countries have local training programs in behavior analysis, resulting in people moving out of their

² The first five authors enlisted the behavior analysts who contributed to this paper by personal referrals. Reports from all contributing authors were collected between January and March of 2023.

respective countries to receive training. Furthermore, it is worth noting that most countries lack a well-established organization for behavior analysis, which could bring professionals together and advocate on their behalf. Consequently, this situation necessitates a comprehensive analysis of the challenges and opportunities involved in establishing a recognized and standardized framework for behavior analysis as a distinct and respected profession within the Latin American context.

There are several ways in which the reader can benefit from the extensive information provided in this paper. For those interested in gaining a clearer understanding of the landscape of behavior analysis in Latin America, we suggest taking the time to read details associated with each country organized in alphabetical order. The information obtained was based on the contributors' responses to the previously mentioned eight questions. The information provided is comprehensive, and there may be some reiteration between countries due to their similarities in the current state of behavior analysis across several Latin American countries. Individuals interested in a particular country can easily locate its information and navigate to that section. Additionally, for those seeking a general overview, we have summarized the commonalities in the discussion, including a table summarizing the information for all countries featured in the study.

Argentina

The field of behavior analysis has been growing steadily but slowly in Argentina over the past 20 years, and it is mostly known for its application with the ASD population. As of April 2023, ABA is not yet recognized by the Argentinian government as an evidence-based treatment, and behavior analysis is not a regulated profession.

To date, there is only one BCBA®, one BCaBA® (Board Certified Assistant Behavior Analyst), and one RBT® (Registered Behavior Technician) certified by the BACB, and one IBA® (International Behavior Analyst), and one IBT® (International Behavior Therapist) certified by the IBAO® in Argentina.

Argentina has several laws that protect individuals with ASD and the treatment they can access. In 2015, the Argentinian congress approved Ley (Law) No. 27043, which declares of national interest the integral and interdisciplinary approach to people with ASD and aims to promote early diagnosis, timely intervention, as well as the training of human resources in health and research related to ASD. This law states that the authority of application shall establish the recommendations to determine the best procedures through standardized tools based on the best scientific evidence available and that those tools

be incorporated in the future in the National Program for Quality Assurance in Health Care. To this day no further advancement has been made on this subject regarding evidenced-based practices.

Law No. 27044 (2014) establishes that sons and daughters with disabilities may receive the pension derived from the death of both parents and/or mothers. Law No. 24091 (1997) states that private insurance companies shall be responsible, on a mandatory basis, for the total coverage of the basic benefits set forth in the present law, required by persons with disabilities affiliated with them. Basic benefits include preventive measures as well as post-diagnostic treatments. The law also states that they are entitled to the following services: psychology, psychopedagogy, speech therapy, psychomotricity, support for school integration, occupational therapy, transportation, and psychological support to families.

In 2019, the Ministry of Health and Social Development published “Consenso sobre el diagnóstico y tratamiento de personas con trastorno del espectro autista” (Consensus on the diagnosis and treatment of persons with ASD, 2019), and it refers to ABA as only an early intervention treatment of ASD individuals, and states that there is no evidence about its safety.

There is no ethics code for the practice of behavior analysis. Every clinician that is part of the therapeutic team guides its own practice by the ethics code that regulates his/her profession, (i.e., ethics code for psychology, etc.). Since behavior analysis is not an independent profession, there are no behavior analytic organizations in Argentina, nor associations or affiliated chapters (i.e., verified by ABAI, Association for Behavior Analysis International).

In Argentina, to get funding for the treatment of people with ASD, the diagnostician, usually a pediatrician or a child neurologist has to make the recommendation for treatment. The recommendation is made in the form of the specialties that will be a part of the treatment team (i.e., psychology, occupational therapy, etc.). This recommendation does not result in treatment delivery led by a behavior analyst, rather a multi-disciplinary team coordinates the treatment plan. Every clinician from the different specialties will be in charge of the delivery of the treatment. Services provided to the ASD population are being delivered by psychologists, speech and language pathologists, occupational therapists, and other clinicians that have degrees with an educational background. The treating clinicians might be from different clinics, which may foster disconnection within the team. If the family wants to have a supervisor to oversee the treatment plan and supervise the team, they have to pay for the supervisor's hours out of pocket. This is due to the lack of recognition of the role of the supervisor, as suggested by the form of structure of the treatment programs in ABA, which is not recognized or covered.

Currently, there are no official training programs (Verified Course Sequence, VCS, or other international certifications) in any public or private university. Post graduate training is restricted to courses provided by private universities conducted by a limited number of behavioral psychologists dedicated to the treatment of ASD.

In summary, considering that ABA is not yet recognized as a regulated independent profession, there may still be a need to reach out to the government and offer to work collaboratively to develop evidence-based programs accessible for everyone, as well as reaching out to universities to include behavior analysis in their undergraduate and graduate programs. Additionally, ABA coursework sequences could be included in psychology, education, organizational management, and similar fields. Recently, local behavior analysis practitioners are providing more information to the general public regarding the various applications of the science of behavior, such as Organizational Behavior Management and animal training, emphasizing that it is not only a therapy for people with a disability diagnosis. The present goal is to keep working on dissemination by creating more resources in Spanish, for example, translating articles into Spanish, publishing articles in our native language, and organizing online and in-person events for disseminating ABA in Argentina.

Brazil

Behavior Analysis is not a regulated profession in Brazil. Service delivery for behavior-analytic services is fairly new and is mostly provided by people with a background in psychology. In Brazil, a bachelor's in psychology confers the title psychologist, and psychologists must register at their Regional Psychology Council to be able to provide treatment services. This council is similar to licensure boards, and each state's board reports to the Federal Psychology Council. Other professions such as speech pathologists, occupational therapists, physical therapists, teachers, etc., also provide ABA services, usually when those professionals have done some post-graduate training in ABA. There are no governmental guidelines currently in place for ABA service delivery. In 2022, after public outcry, there was a clarification to the guidelines of the Agência Nacional de Saúde (ANS, National Agency for Health), to ensure that ABA services are included in the services covered by health insurance. Before this clarification, health insurance providers would deny services on the grounds that the ANS had not explicitly stated that ABA services were covered (Poder Judiciário do Brasil, 2021).

There are no specific laws in Brazil protecting people receiving ABA services and may not be included until the behavior analysis profession becomes regulated. However, a

related law protecting people with disabilities was voted into effect in 2015, and it is known as Estatuto da Pessoa com Deficiência (Statute on People with Disabilities).

In Brazil, the process to get healthcare providers to cover ABA services has been challenging, and similar to the events in the US, required much pressure from the families of people with disabilities and autistic children that resulted in lawsuits. Some health insurance companies only cover one hour of therapy a week because there is no regulation of the services. Families have to then sue the health insurance companies and make a case using best practice guidelines from the USA, such as The Council of Autism Service Providers (CASP, 2022) guidelines translated into Portuguese, the BACB guidelines, etc.

Because of the lack of recognition of behavior analysis as a profession in Brazil, ABA practitioners refer to the codes of ethics of their respective professions (psychology, speech pathologist, occupational therapist, etc.) and also use the codes of ethics from the BACB and the QABA as guidelines. The Associação Brasileira de Psicologia e Medicina Comportamental (ABPMC, Brazilian Association of Behavioral Psychology and Medicine) created service guidelines for people with atypical development, through a special committee formed by members of the association and subject matter experts. The guidelines follow the BACB's practice guidelines (Souza, 2020).

Brazil has a rich tradition in behavior analysis that started with Fred Keller's contributions to the University of Brasilia (UnB) to establish the first experimental analysis of behavior (EAB) program. Currently, Brazil has many university programs at the master's and doctoral level that train behavior analysts, in both federal, state, and private universities. However, the graduate program model focuses on training researchers and professors, not practitioners. There is one private program that focuses more on a scientist-practitioner model. Since December of 2019, when the BACB announced a number of changes to their international focus and certification that went into effect on January 1, 2023, an increasing amount of approved coursework for QABA certifications has emerged. There are two main behavior analysis organizations in Brazil, Associação Brasileira de Ciências do Comportamento (ABPMC, Brazilian Association of Behavioral Sciences) and Associação Brasileira de Análise de Comportamento (ACBr, Brazilian Association for Behavior Analysis), ABPMC being the official ABAI® Brazilian Chapter. Brazil also has a local chapter of the Association for Contextual Behavioral Science.

Regarding plans for the development of applied behavior analysis, a national training and consultation organization plans to increase the number of classes they currently teach and provide group and individual supervision for individuals pursuing QABA certifications. This organization also offers continuing education units to ensure that certified people

have opportunities of maintaining their certification with offerings in Portuguese. Several providers are also considering the creation of an organization to support the certification efforts, focusing on service providers, similar to the Association of Professional Behavior Analysts (APBA, 2018). There is much interest for certification in Brazil, and both professionals and families clamor for quality services. Although certification may be necessary but not sufficient, it allows the public to know who has met the minimal standards, and through it, increase the overall quality of services provided.

Chile

Behavior-analytic applications for ASD treatment are relatively unknown and new in Chile. Over a decade ago, the National Ministry of Health published the first official governmental guidelines offering evidence-based recommendations for ASD diagnosis and treatment (Ministerio de Salud [MINSAL], 2011). These guidelines described behavior interventions as “the approach with better evidence” and rated them as “recommended, based on studies of moderate quality” (MINSAL, 2011, p.28). Despite these initial recommendations, recent estimations have suggested that consumers use behavior interventions less frequently than other healthcare services, such as speech and language therapy, occupational therapy, and pharmacological treatment (García et al., 2022).

Recently, the Chilean Senate approved Law No. 21545 (2023), which aims to protect the rights of autistic individuals and reduce barriers to accessing healthcare, education, and inclusion. With a focus on early detection and ongoing support through different life stages, the law proposed to evaluate the inclusion of health-related services associated with autistic care to the Garantías Específicas de Salud (Health-specific Guarantees) plan, which may ensure financial coverage by the Fondo Nacional de Salud (National Health Fund) and or private funding by the Instituciones de Salud Previsional (Health Insurance Institutions). This newly proclaimed law still does not specify which health-related services may receive coverage or the level of scientific evidence that these should hold. As these national health plans start to be implemented, we expect to have a clearer understanding of the specific services they will cover. In the meantime, estimations have indicated that most families must cover health-related services out of pocket, partially or in full (García et al., 2022).

Because the practice of behavior analysis is not acknowledged as an independent profession, there are no university programs leading to a professional degree in the area and no specific health codes for behavior-analytic services coverage. Over the past decade, practitioners from related fields have acquired competence in ABA related to their scope of practice.

Anecdotal data collected for the present article indicated that out of the nine certificants listed on the BACB’s website, eight were speech-language pathologists, and one was a clinical psychologist (see Table 1 for details). Currently, there is no national registry to identify qualified ABA practitioners in Chile, and families have no other means to confirm the competence of behavior-analytic service providers.

Despite these barriers, some educational initiatives to prepare practitioners in ABA interventions for ASD treatment have materialized in recent years. A master-level ABA program was approved under the 4th edition task list in 2016 (BACB, 2012). Unfortunately, accreditation for this program concluded in 2019 (ABAI, 2023) when the BACB discontinued its international scope, resulting in only one cohort graduating from the program. Similar to what has occurred in other Latin American countries, coursework options leading to alternative international credentials (e.g., QABA, IBAO) have emerged. Unfortunately, the shortage of qualified supervisors in the country and no university- or clinic-based practicum sites offering training for new behavior analysts has resulted in students graduating from these programs without any supervised fieldwork experience. Since there are no contingencies in place for the practice of ABA, graduates from these courses are not required to undergo clinical training or complete certification exams to deliver ABA services or represent themselves as ABA “specialists” with families.

The absence of local regulations in behavior analysis leads to a lack of professional ethics codes to practice. Local ABA practitioners not certified by international boards follow codes established by their respective professional colleges (e.g., psychology, speech-language pathology) if they are active members of these national professional organizations. Despite these challenges, local certified practitioners have taken action to promote the dissemination of ABA in Chile by forming different professional associations: Asociación Chilena Análisis Aplicado de la Conducta (Chilean Association of Applied Behavior Analysis) in 2022 and the association of practitioners ABA Chile in 2023 (<https://abachile.cl>). Both organizations share a common short-term goal of educating all relevant stakeholders, including caregivers, healthcare professionals, and higher education institutions, about the benefits and scope of evidence-based ABA practices in treating ASD-related challenges. More importantly, they aim to educate the public about the necessary competencies for ABA service providers and to promote the regulation of practitioners to protect consumers from malpractice.

Colombia

There are no laws that protect individuals who may receive ABA services in Colombia. The only document that mentions ABA interventions and services for individuals with

ASD is the “Protocolo clínico para el diagnóstico tratamiento y ruta de atención integral de niños y niñas con trastornos del espectro autista” (Clinical protocol for the diagnosis, treatment and comprehensive care of children with ASD) published in 2015 by the Colombian government. This protocol recommends interventions rooted in ABA for treating children with autism spectrum disorder and that these interventions should be directed by expert professionals in the field, specifically psychologists with knowledge in behavioral psychology. It also states that ABA interventions must be accompanied by an interdisciplinary team of speech therapists, occupational therapists, child psychiatrists, neuro-pediatricians and social workers.

The protocol states the following: (a) the team leader should be a health professional with training in behavior analysis or a clinical psychologist who is “certified” (it does not state certified by whom) and provides evidence of clinical experience and supervised training, (b) training should be between 40 to 60 h and supervision must be a minimum of 1000 h (it does not state the type of training, the content of the training or the qualification of professors or supervisors), and (c) the team leader must train the other members of the team and prove these trainings through skill and competencies assessments.

Behavior analytic services are covered by most local health care institutions. The clinical protocol for ASD in Colombia mentions the following services: pediatric neurology, child psychiatry, pediatric, occupational therapy, speech therapy, and social work. There is no local code of ethics for the practice of behavior-analytic services that guide practitioners in Colombia.

The Konrad Lorenz University in Bogotá Colombia had a VCS but they did not renew it after the BACB 4th Edition. There are a few “diplomados” (similar to a certificate program requiring on average 50 h) offered by some Universities in “ABA methodologies” and training offered to a wide range of professionals from health-related areas. There is not much information about the training, experience or credentials of those who teach these courses.

ABA Colombia is a behavior analysis organization in Colombia and an ABAI affiliate chapter. This behavior analysis organization in Colombia plans to: (a) disseminate behavior analysis in Colombia, (b) group and represent behavior analysts in Colombia, (c) work actively in the political and legal recognition at the national level of the standards of the international certifications of behavior analysts such as the BACB, ABAI, and Association of Professional Behavior Analysis (APBA), (d) act as the official spokesperson of behavior analysts before the various authorities and agencies of the State and the Government of Colombia, and before other institutions and public or private entities, (e) monitor compliance with the standards of international and national organizations that credential behavior

analysts, (f) establish, promote, and endorse indicators and technical and technological standards to ensure the quality of ABA services, (g) represent and manage national and international relations of interest or benefit to behavior analysts in Colombia, and (h) be an affiliate chapter of ABAI or the international association that represents professionals in behavior analysis at the international level.

Costa Rica

In Costa Rica, professionals that provide what is referred to as “behavior therapy” for individuals with ASD are typically occupational therapists, speech pathologists, special education teachers, or cognitive behavioral psychologists. These individuals have often completed some sort of course in behavior analysis but do not typically have formal training in behavior analysis. While no governmental guidelines specifically mention ABA, occupational therapists and speech therapists that provide behavior therapy must adhere to the standards of the Colegio de Terapeutas de Costa Rica (Therapist Association of Costa Rica, *n.d.*), while special education teachers must adhere to the standards of the Colegio de Licenciados y Profesores de Costa Rica (Colypro, College of Licentiates and Professors of Costa Rica, *n.d.*). Finally, psychologists providing behavior therapy must adhere to the standards of the Colegio Profesional de Psicólogos de Costa Rica (CPPCR, School of Psychologists of Costa Rica, *n.d.*).

Law No. 9940, known as Cumplimiento de Derechos y Desarrollo de Oportunidades de las Personas con Trastorno del Espectro Autista (Fulfillment of Rights and Development of Opportunities for Persons with Autism Spectrum Disorder) was enacted in 2021 and attempts to: (1) promote the early detection and diagnosis of ASD, (2) guarantee the adequate inclusion of individuals with ASD, thereby facilitating their autonomy, (3) guarantee that individuals with ASD and their families have access to adequate and individualized support as well as interventions across their lives, and (4) promote the social awareness as well as the knowledge and training of professionals working in the area of ASD.

Additionally, Article 9 of Law No. 5395 (1973), Ley General de Salud (General health law) states that all individuals have the right to physical and mental health prevention, recovery, rehabilitation, and access to services at different levels of care and settings, as well as the availability of treatments, with special consideration given to individuals with disabilities. Article 13 of Law No. 5395 states that children have the right to have their parents and the State oversee their health and their social, physical, and psychological development, and that children with disabilities will receive specialized services.

Although some insurance companies cover services such as occupational therapy and speech therapy for individuals

with ASD, behavior analytic therapy services are not funded. Currently, individuals receiving behavior analytic services self-fund. The Caja Costarricense del Seguro Social (CCSS, Costa Rican Social Security Fund) has the obligation to provide healthcare services to individuals with ASD (Caja Costarricense del Seguro Social, *n.d.*). Additionally, it provides assessment and ASD diagnosis at the Hospital de Niños (HNN, Children’s Hospital). Unfortunately, services are typically reserved for more severe cases and often have a long waiting list. The Ministerio de Educación Pública de Costa Rica (MEP, Ministry of Public Education of Costa Rica, *n.d.*) also has the obligation to provide services in education and special education centers. These services include special education, psychology, speech therapy, and occupational therapy, but, unfortunately, these services are not always available in all education centers.

There is no ethics code for the practice of behavior-analytic services that guide practitioners. Individuals that practice ABA in Costa Rica, if credentialed or working toward a credential, must adhere to their credentialing board’s code of ethics (e.g., BACB, QABA, or IBAO).

Currently, some private clinics offer training for the IBT certification as well as supervision for the IBT. Additionally, there are some universities that currently provide a cognitive behavioral psychology track; however, this author is unaware of the extent to which behavioral principles are covered in these university programs. There are no behavior analysis organizations in Costa Rica nor does Costa Rica have associations or affiliated chapters from international organizations. Currently, there is one registered BCBA in Costa Rica. It is possible that there are other registered individuals providing ABA services in the country that are currently not listed in any credentialing board website (e.g., behavior analysts that travel to Costa Rica for a brief period of time); however, it is obvious that with such a low number of behavior analysts in the country, there is great opportunity for growth and development.

Since there is only one BACB credentialed behavior analyst in Costa Rica, it is recommended for professionals interested in behavior analysis to seek in-person or remote training in the field and raise awareness about the field locally. As the number of behavior analysts in Costa Rica grows, there is hope to see more behavior analysis training programs that can help increase the number of individuals in the field of behavior analysis even further.

Cuba

Despite the lack of recognition of the profession of behavior analyst in Cuba, there are autism master’s degrees and special needs degrees that may encompass some characteristics of the interventions found in behavior analysis programs.

Not specifically for ASD, however, Cubans with disabilities are protected under Chapter VI of the Cuban Constitution (1992, revised 2002). According to the newspaper *Granma* (del Sol, 2022), Article 42 of Cuba’s Constitution states that people cannot be discriminated against because of their disability and Article 89 clarifies that people with disabilities enjoy equal rights as the rest of the population and therefore these individuals must be included in society.

There is no reimbursement structure for behavior analysis since there are no behavior analytic services on the island. All healthcare services in Cuba are covered by the government. The main entities that cover therapies that provide treatment to ASD are the Cuban Ministry of Public Health and Ministry of Education. Individuals with ASD are mainly treated by psychiatrists, physicians, some psychologists, and teachers. As opposed to other countries, psychiatrists in Cuba not only provide medication management, they also facilitate psychotherapy to individuals. Psychologists primarily conduct research, and teachers work directly with children with ASD in the school setting. Cuba has a couple of “specialized” centers that provide occupational therapy and support for children with ASD; however, it is unknown if they are using ABA-based interventions.

There are four ASD schools in Habana, one in Pinar del Río, one in Holguín, one in Santiago de Cuba, one in Cienfuegos, and one in Camagüey. These schools do not currently employ BCBA and children are most likely not being provided ABA services; however, it is unknown whether they are using “ABA-derived principles” in their schools.

There are no official training programs for behavior analysis in Cuba. However, on two different occasions, applied behavior analysis training was provided to a group of professionals (psychiatrist, teachers, psychologists, and medical doctors). It is unknown if professionals have received ABA training after 2019. There are, however, master’s degrees in special education and ASD, but these curricula do not include formal ABA training. There seem to be some initiatives in Cuba toward providing more support to children with different diagnoses, including ASD. However, this is something that has been growing slowly over the years.

Dominican Republic

In the Dominican Republic, Behavior Analysis is not established as an independent profession. Nevertheless, the limited number of certified behavior analysts nationwide (refer to Table 1) has a minor impact on service accessibility for the population in need. Other professionals without ABA certification, have incorporated behavior-analytic services in their practices. These professionals are mainly clinical psychologists or speech and language pathologists. None, however, claim that they

strictly provide ABA services, rather they incorporate some techniques alongside other forms of interventions in their practices.

The Dominican Republic has had a general disability law since 2000 known as *Ley General Sobre la Discapacidad en República Dominicana* (General Law on Disability in the Dominican Republic), but no governmental guidelines that specifically mention ASD individuals or the provision of ABA services. Although, there is currently a bill discussion in the Senate regarding the protection and non-discrimination of ASD individuals. The Department of Education has designed “Resource Classrooms,” which are intended to function as classrooms designed exclusively for children with specific educational needs. However, these classrooms are not monitored by appropriate certified professionals. Also, changes in government have a huge impact on the proper continuity of these initiatives and policies.

Some insurance providers reimburse a certain amount of monthly ABA hours. Nevertheless, these reimbursement plans are restricted to higher-tier insurance plans and must adhere to specific eligibility criteria (e.g., the child has to already be insured by the insurance company before the diagnosis is made, otherwise, he/she would not be applicable). Families that cannot afford the most expensive insurance plans have no access to these reimbursements benefits. Some families employed in certain government offices receive financial aid for their children’s therapies, but this assistance is highly variable on a case-by-case basis. Notably, Speech and Language Pathology services receive reimbursement from select insurances, while government coverage is currently unavailable.

There is no official ethics code for behavior analysts locally in the country. There have been a few professionals working on developing one within an ABA professional organization that is striving to take place. However, the scarcity of certified behavior analysts has posed a challenge for the solidification of a group. Regarding this, the sole behavior analysis training program is currently offered as a Master’s Degree in Behavior Analysis at a local university.

A professional organization, ABA Dominicana, is in the process of coming together, but it is still a work in progress. As of now, there are no other associations or chapters established. Local professionals intend to continue working toward the official establishment of ABA Dominicana as the behavior analyst organization nationwide. It will require some additional time, but they are determined to make it happen in the near future. Especially since the BACB no longer certifies in their country, they feel the urgency to maintain some level of training and practice standards, in order to ultimately protect their clients.

Ecuador

In Ecuador, individuals offering ABA services are typically professionals from different areas such as educators, psychologists, speech therapists, or occupational therapists who work with people diagnosed with ASD or other developmental disabilities. However, only a handful of them are certified by international boards (see to Table 1). This means that most of the available professionals providing “ABA therapy” lack official recognition of their competencies to practice ABA. Therefore, consumers have no official means of verifying the qualifications of these individuals.

The Ecuadorian parliament passed legislation to ensure the prevention, detection, treatment, and rehabilitation of disabilities for individuals with disabilities (*Ley Orgánica de Discapacidades*, 2012). Additional efforts specific to support the welfare of individuals diagnosed with ASD include the publication of the Autism Practice Guide, which was created by the Ministerio de Salud Pública del Ecuador (Ecuadorian Health Ministry) to guide families and professionals who work with the ASD population (Ministerio de Salud Pública del Ecuador, 2017). This document details ASD diagnosis, treatment, rehabilitation, follow-ups, and quality monitoring and includes ABA services within its recommendations for communication and sensory-motor development-related challenges. The guide also recommends other approaches, such as Education of Autistic and Related Communication Handicapped Children (TEACCH®), SCERTS®, Picture Exchange Communication System (PECS®), Cognitive-behavioral therapy, LEGO® Based Therapy, sensory integration, art therapy, animal-assisted therapy, kinesiology, psychoanalysis, Early Start Denver Model (ESDM), assisted communication, and treatments based on human development.

Regarding coverage for these services, the Health Ministry provides free speech therapy, occupational therapy, and psychological services to individuals registered under the Public Social Security System. In the private sector, individuals with health insurance may get reimbursement for these services. However, the reimbursement amount may differ based on the insurance policy, and it may range from 30 to 100% of the total cost of the sessions. Therefore, consumers of ABA services may receive coverage if they receive services from professionals whose primary profession is within the fields mentioned above. Although some individuals may access these funding sources, most use private pay to access assessment and rehabilitation services.

Similar to other countries in Latin America, Ecuador does not have regulations for practice and no official training programs for behavior analysts. The only option for individuals seeking training is to complete online

courses or programs leading to international credentials (e.g., IBAO or QABA). The following steps for Ecuador would be creating an ABA professional association that promotes practice regulation and defines minimal competencies to practice and ethical standards. Other initiatives can include cooperation with local higher education institutions to create certification or professional degree programs. Increasing awareness about the importance of ABA in the treatment of challenges related to ASD is crucial. The absence of regulation poses a threat to the proliferation of bad practices by unqualified practitioners, which may ultimately misrepresent and undermine the socially significant impact of our science.

Guatemala

According to a local newspaper (Ramírez, 2019), Guatemala has at least 225,000 individuals diagnosed with ASD. Although the World Bank (n.d.) states that Guatemala has achieved the largest economy in Central America, this does not translate to reducing poverty and inequality. Considering that 61.6% of people live in multidimensional poverty in Guatemala (Multidimensional Poverty Peer Network, n.d), questions arise as to whether the Guatemalan ASD population and their families have access to services and support regarding disability and special education. Unfortunately, no official information from governmental authorities regarding ASD prevalence, demographics, caregiver concerns, or access to healthcare and education exists to inform Guatemala's policymakers, educators, and the general population.

The history of ABA in Guatemala began in 2012 when the first education center started offering ABA services to families through consultation with experts from Spain. It was not until 2017 that other similar projects began to emerge, including the opening of another educational center providing ABA services in collaboration with Miami-based providers, in addition to the inauguration of an ABA master's program in Spanish, and the first Guatemalan citizen obtaining BCBA certification. Currently, there are three to four active clinics that utilize ABA in Guatemala, three active BCBAs, including two psychopedagogist and one psychologist, and two university programs that offer ABA training, although these are no longer VCS and do not provide certification pathways to students. Since the BACB decided to discontinue certifying international applicants, no attempts to provide certifications through alternative international boards or national organizations or the formation of local ethical guidelines have been recorded.

In Guatemala, government funding for special needs services is scarce. Furthermore, no local insurance companies or laws provide funding for services. Since ABA-based

interventions are not well-known and only offered by a few service providers, all ABA services are carried out through private pay or sponsorships. Decree (Decree) No. 135–1996 (1997) is the only existing law designed to protect the rights of individuals with disabilities. This law states that discrimination based on disability is banned and guarantees individuals equal access to health services, employment, information and communication, sports and recreation, and inclusion in education. Nonetheless, this law has had little impact on funding and service accessibility for individuals with more “invisible” disabilities such as ASD. Concerning ASD, the only official law that currently exists was passed in 2018, declaring April 2nd as National Autism Awareness Day and urging advocacy efforts to increase understanding of this condition on this day (Ley del Día Nacional del Autismo, 2018). In addition to the aforementioned laws, a few organizations exist in the country dedicated to fundraising and advocacy. Some of these organizations include Asociación Guatemalteca por el Autismo (Guatemalan Association for Autism) and Instituto Neurológico de Guatemala (Guatemalan Neurological Institute). Although these organizations do not have BCBAs on site and provide other non-ABA-related services, they offer occasional ABA courses and include some programs that use ABA principles in their delivery.

The most common alternative approaches for ASD intervention in Guatemala are sensory integration and speech therapy. ABA-based interventions have yet to be established as a standard in ASD care. Moreover, advancements and regulations are needed to ensure the existing service delivery offer aligns with the most up-to-date practices. In recent years, local ABA organizations have made efforts to disseminate ABA efficacy and innovations while demystifying controversies around it. For example, there are few centers offering ABA services in the country that have carried out dissemination sessions and public campaigns over social media to raise awareness about autism, neurodiversity, and ABA as an evolving, compassionate, and reformed science seeking to improve the lives of individuals diagnosed with ASD and of all of those in search for a way to transform their behavior and increase their quality of life.

Overall, there is much to be done in Guatemala to raise awareness and promote advocacy regarding ASD, disabilities, and access to behavior-analytic services. Future steps include opening certification options and defining practice regulations to protect consumers of ABA services. These actions may be supported by building more international liaisons and disseminating the practice through conferences and campaigns. For now, our goal is to raise awareness of the science of behavior and its contributions to helping individuals in our country live dignified and plentiful lives.

México

The emergence of Behavior Analysis as a profession began in Mexico during the 1960s. Between the 1970s and 1990s, Behavior Analysis experienced rapid growth, with several undergraduate programs incorporating behavior analysis courses and the development of graduate programs and research centers at universities such as Universidad Veracruzana, Universidad Nacional Autónoma de México, and Universidad de Guadalajara. In 1973, a community was founded in Mexico inspired by Skinner's book "Walden Two," and still provides services to individuals with skill deficits. In 1975 la Sociedad Mexicana de Análisis de la Conducta (Mexican Society of Behavior Analysis) and its journal, *Revista Mexicana de Análisis de la Conducta* (Mexican Journal of Behavior Analysis), were founded and remain active to this day. The society also has an affiliated chapter with the ABAI.

Currently, there are at least three doctoral-level graduate programs in Mexico with a behavior analysis orientation in the previously mentioned universities, some of which are doctoral programs in Behavioral Science. However, these programs are mainly focused on basic research, none specialize in ABA, and neither of these has a verified course sequence. The specific content of Behavior Analysis taught in educational programs greatly differs from one institution to another, and there is no official certification or recognition as a separate profession from Psychology in Mexico. This lack of recognition is a significant challenge for the growth of Behavior Analysis as a profession in the country. This is evident in the limited count of certified behavior analysts, as illustrated in Table 1.

Behavior analytic services in Mexico have had a strong focus on individuals with developmental disabilities, including ASD. In 2015, the Mexican government passed the *Ley General para la Atención y Protección a Personas con la Condición del Espectro Autista* (General Law for the Attention and Protection of People with Autism Spectrum Condition), a national law that guarantees the right of people with ASD to receive "habilitation treatment." This law serves as the foundation for collaboration among government agencies at the local and national levels to safeguard the rights of individuals with ASD. Additionally, it imposes an obligation on public and private institutions, local governments, parents, and medical and educational professionals to protect the rights of people with ASD. Since the enactment of this law, several states have passed similar legislation (Lay, 2016).

Several reports and governmental manuals distributed by governmental agencies recognize ABA interventions for the treatment of people with ASD (Zavaleta, et al., 2018). A recent report (Zavaleta, et al., 2018) found that only between 2 and 25% of medical centers across Mexico provide ABA,

ESDM, or TEACCH treatment due to a lack of infrastructure or training. Also, the Instituto Mexicano del Seguro Social (Mexican Social Security Institute) has published a Clinical Practice Guideline for the Diagnosis and Treatment of ASD (2012), which emphasizes the use of standardized diagnostic tools and a multidisciplinary team approach to treatment, including behavioral interventions, speech therapy, occupational therapy, and pharmacological treatment for comorbid conditions. The guideline also highlights the need for individualized treatment plans and the importance of providing support and education to families and caregivers of individuals with ASD. The guideline addresses the challenges of providing appropriate care to individuals with ASD in Mexico and stresses the need for increased public awareness and access to resources, as well as collaboration between health and educational systems to improve outcomes for individuals with ASD.

In México, ABA interventions are typically not covered by private health insurance, and therefore individuals seeking these services for themselves or family members with ASD must pay for them privately. This can result in limited access to ABA services for those who cannot afford them. However, general services for individuals with ASD in Mexico are covered by the state, specifically by the Secretaría de Salud (Ministry of Health) and the Secretaría de Educación Pública (Public Education Secretary). The Secretaría de Educación Pública has a Department of Special Education that provides support through the *Unidades de Servicio de Apoyo a la Educación Regular* (Units of Support Services to Regular Education, USAER) and *Centros de Atención Múltiple* (Special School for Multiple Handicaps, CAM). USAER teams support general education schools by providing different strategies to regular education teachers to work with special education students, including those with ASD. CAMs are special education schools that attend to children with multiple diagnoses, including ASD. Although it is recommended for teachers at CAM to implement ABA treatment for individuals with an ASD diagnosis (Vazquez, 2015), it is unknown if it is actually implemented or if teachers receive training for its implementation.

Regarding the protection of the practice, services providers and consumers by having an ethics code, the *Asociación Mexicana de Psicología* (Mexican Association of Psychology) published the Mexican Ethics Code for Psychologists (2007), but this code is not specifically directed toward behavior analysts, and, to our knowledge, it has not been significantly updated since its original publication. However, in 2021, the *Organización Mexicana de Practicantes del Análisis Conductual Aplicado* (Mexican Organization of Practitioners of Behavior Analysts, OMPAC) was established, and they developed an ethics code specifically for the practice of behavior analysis, which will be public soon. OMPAC also aims to establish a network with other institutions and

organizations that share the same language and values to continue promoting Behavior Analysis. Through these efforts, OMPAC aims to increase awareness and understanding of behavior analysis in Mexico, as well as to promote the highest ethical standards in the practice of behavior analysis and, eventually, its certification. For this endeavor, OMPAC has received the support of the BACB, which has allocated resources to assist international organizations, along with the valuable consultation of their Director of International Development, Neil Martin.

Regarding plans for the future development of the practice, OMPAC is dedicated to advancing the profession of Applied Behavior Analysis in Mexico. One of their key initiatives is the publication of a code of ethics that specifically addresses the practice of behavior analysis. They are also actively promoting the dissemination of BA through various channels, including webinars, interviews with other specialists, and other media platforms. In addition, OMPAC hosted its inaugural international two-day conference on BA in Oaxaca, Mexico, and has translated relevant resources from English to Spanish to expand the reach of the profession. OMPAC is also focused on establishing and strengthening its network with other institutions and organizations that share the same values to continue promoting Behavior Analysis. The overall goal of these efforts is to increase awareness and understanding of BA in Mexico and promote the highest ethical standards in the practice of BA.

Nicaragua

Although there are currently no specific laws or regulations governing behavior analysis practice in the country, many professionals who provide behavior analytic services in Nicaragua, such as psychologists, special education teachers, and speech-language pathologists, work at Centro de Intervención Edu-Terapéutico (CIE). CIE is the first and only non-profit organization in the country to provide ABA services for individuals with ASD and related disorders, and its founder is the first and only BCBA in Nicaragua.

CIE has a team of approximately 80 professionals who are trained in ABA and work under the guidance of the founder to improve socially significant behaviors in their clients. They currently provide services to more than 200 families. Although there is no specific local code or ethics code for the practice of behavior-analytic services that guides practitioners in Nicaragua, CIE's professionals are trained in the principles of ABA to provide effective and ethical services to their clients. CIE's training program includes both theoretical and practical components and is designed to prepare professionals to provide effective and ethical ABA services.

While behavior analytic services are typically not covered by local healthcare institutions in Nicaragua, individuals

with ASD who are covered under the Instituto Nicaragüense de Seguridad Social (Nicaraguan Social Security Institute) through their workplace can access ABA services provided by CIE at no cost or with partial coverage (Ley de Seguridad Social, 1990, 2005). However, the demand for ABA services in Nicaragua is greater than what CIE can provide, and the cost of ABA services can still be prohibitively expensive for many families who do not have access to this coverage. Additionally, there is a lack of government funding or insurance coverage for these services outside of the workplace, which means that many individuals with ASD in Nicaragua still do not have access to the ABA services they need to reach their full potential.

Efforts are underway to promote the recognition and regulation of the profession of behavior analysis in Nicaragua. Some plans or next steps regarding the development of ABA in the country include promoting ABA services, establishing partnerships with universities to promote the development of ABA programs and training for professionals in the field, providing education and training to parents and professionals related to ASD and the benefits of ABA services, and establishing strategic relationships with international organizations to promote training, advocacy, and the development of ABA services in Nicaragua.

Panama

Currently, there are only five BCBAs in the country (see Table 1), although additional professionals offer behavior modification services to families with no specific certification. These professionals are often psychologists that usually participate in courses related to teaching and working with individuals with ASD. These training programs are different in length and content and often offered by individuals not certified as behavior analysts. Therefore, as in many other countries in this paper, there are no constraints regarding the background experience practitioners should have to offer behavior-analytic services to individuals. Other professionals who provide services to individuals with ASD are neurologists, psychologists, occupational therapists, speech pathologists, and special education teachers.

One of the main organizations when referring to ASD in Panama is Centro Ann Sullivan Panamá or CASPAN (Ann Sullivan Center Panama). This entity is a public, non-profit organization responsible for offering resources, services, and support for the ASD population, their families, and the community at no cost. This institution emerged as an adaptation from the original Ann Sullivan Center in Peru and currently operates through a curriculum called Curriculum Funcional Natural (Natural Functional Curriculum) that guides its interventions and service. They offer early intervention programs, parent training, special education, school inclusion,

and work immersion for older students (CASPER, 2023). Also using the natural functional curriculum is a foundation called “Fundación Enseñame a Vivir” (Teach me how to live), this is a non-governmental organization that provides therapy and services to the population with ASD, mainly younger children, at a low cost or through state funding and scholarships (Esquivel Olmos, 2016).

In Panama, there are a few other foundations and organizations that focus on providing support, services and guidance for individuals on the autism spectrum. For teenagers and adults with ASD, Panama has a foundation called “Fundación Soy Capaz” (I am Capable Foundation). This organization focuses on independent and daily living skills as well as job immersion preparation for older teens and adults with ASD (<https://fundacionsoycapaz.org.pa/>). While these foundations offer a good service at a lower cost than the private practice, they can only serve a very limited number of families making it difficult and time consuming for other families to receive these services across the country.

Another option for receiving ASD-related services in Panama at no cost is the Instituto Panameño de Rehabilitación Especial (IPHE, Panamanian Institute of Special Habilitation, 2019). This institution serves as a special education school, providing different services such as psychology, psychiatry, equine therapy, paedopsychiatry, neurology, speech, occupational, and physical therapy to their students when needed and after presenting a diagnosis. IPHE has a branch called “Programa de Autismo” (Program for Autism), which offers training and ongoing support to teachers working with the students who come to their facilities for schooling or attend other inclusive classrooms in typical state schools (IPHE, 2019). Although Panama has some public organizations working to support and protect the rights of individuals diagnosed with ASD, their impact is limited owing to the small pool of trained professionals, difficulty with follow-up care, and ultimately lack of resources. Families often struggle financially and emotionally and have difficulty balancing work–life while caring for their children. Additionally, these institutions typically do not offer ABA-based interventions, which results in families looking for solutions in the private sector or overseas.

At the time of this writing, there are no governmental guidelines that mention ABA or laws that specifically protect individuals receiving ABA services either. However, there are laws protecting individuals with ASD and related diagnosis. In regard to laws for individuals with disabilities in general, Panama passed Law No. 15 on May 31, 2016. This law establishes equal opportunities for people with disabilities nationwide by stating that people with disabilities should be included in the regular education system. This act of inclusion in schools should accommodate the needs of this population and ensure support both inside and outside of the classroom with appropriate guidance from

Panama’s education ministry and the IPHE. The state entity in charge of implementing this law is Secretaría Nacional de Discapacidad or SENADIS (National Secretary of Disability). SENADIS also grants certificates of disability and advocates for the rights and needs of this population (SENADIS, 2023).

In regard to laws about the rights of students with special needs in an academic environment, Decreto Ejecutivo (Executive Decree) No. 1 from February 4, 2000, states the norms regular schools should follow for including students with special needs, referred to in this decree as students with Necesidades Educativas Especiales (Special Education Needs). These norms included the distinction of the different inclusion models of instruction such as fully immersed inclusion, partially immersed inclusion or self-contained classrooms.

Shortly after, Panama released Executive Decree No. 30 on March 16, 2000, where the Ministry of Education establishes the role and functions directives from the national department of special education should follow. According to this decree, the national department of special education should be responsible for regulating and supervising modifications and strategies implemented in all schools to promote inclusion and facilitate instruction for students with special needs. Another important step toward inclusion came with Resuelto (Resolution) No. 924 from June 24, 2006, where Panama established and introduced the Programa de Educación Individual (PEI, Individual Education Program or IEP) to further incorporate and teach students with special needs, acknowledging their individual strengths and needs while included in a regular classroom.

In 2023, Panama publicly approved Law No. 292 on April 12. This law establishes inclusion policies and equal rights in all public and private schools in Panama. In addition, this law also states that MEDUCA, Ministerio de educación (Ministry of education), should guarantee that teachers in all schools, and from all academic levels, get the appropriate training and are up to date on the different strategies and methods for integrating students with special needs in their classrooms. Furthermore, Law No. 292 structures the implementation and creation of the Programa Educativo Individualizado (PEI, Individualized Education Program) by integrating parents, teachers, special educators, directives and members of the technical team. The PEI will have academic, social, and practical life skills goals for each student to be learned and assessed within an established timeframe.

In regard to laws about ASD exclusively, Panama passed Decree No. 282, on April 4, 2011, where April is declared as the national autism awareness and inclusion month. In addition, the bill also sought to guarantee the protection and inclusion of individuals with ASD while protecting their fundamental rights, such as access to education, healthcare, and job opportunities. This bill is also part of a draft of a law

known as Law No. 163, proposed by state deputies on January 4, 2023 (Silva & Vasquez, 2023). In this draft, they mention the challenges Panama is facing to satisfy the needs of a growing population of individuals with ASD, emphasizing the importance of early intervention, professional training, and better infrastructure. Additionally, this draft addresses the need for scientifically proven interventions such as occupational therapy, sensory integration, behavior therapy, and speech therapy to improve the lives of individuals on the autism spectrum.

At this moment, local healthcare institutions do not reimburse or cover behavior analytic services. Partial funding for physical therapy, speech therapy, and occupational therapy exists for individuals with a valid certificate of disability from Secretaría Nacional de Discapacidad (National Disability Secretariat), as stated in Law No. 134 from December 31, 2013. In addition, private insurance companies may cover some amount of therapy, but it varies depending on the type of insurance policy each individual has.

Since there is no ethical code for behavior analysis in Panama, ABA practitioners in the country must follow their board's code of ethics (e.g., BACB, IBAO, and others) or follow the code of conduct of their profession, with their own values and licensing credentials.

Moreover, there are no official local training programs for behavior analysts nor are there behavior analysis organizations or associations. Interested individuals must pursue international certification at their own expense. Local practitioners are hoping to create an association for behavior analysts residing in Panama. Within the scope of this association, plans include offering training and certification at a basic level, supervising individuals implementing behavior-analytic procedures, regulating the practice of ABA, and disseminating the science of behavior through conferences with other behavior analysts, families, and related professionals. Future steps for Panama should include advocating for laws that specify a course of treatment for individuals with ASD and incorporating ABA-based interventions as part of the treatments recommended. It is also necessary to include behavior analytic coursework at the university level in the hopes that with proper training the delivery of ABA can become more efficient, available, and life-changing for the individuals who require services.

Perú

Behavior analysis is not a recognized profession in Peru; nevertheless, psychologists have included the delivery of behavior analytic services into their professional scope of practice. While there are no specific government guidelines mentioning ABA, the Ley de Protección de las Personas con Trastorno del Espectro Autista (Law for the Protection of

People with Autism Spectrum Disorder) has been in place since 2014. This law includes recommendations for the care of individuals with ASD, offering protection for those who may receive ABA services.

In Peru, behavior analytic services are not covered or reimbursed by local healthcare institutions; instead, these services are primarily funded by private payments or not-for-profit organizations. The government does not provide any coverage for services related to ASD or the populations that behavior analysts serve.

Currently, there is no established local code of ethics for the practice of behavior-analytic services in Peru. However, individuals interested in this field can access single course training programs offered by institutions such as Centro Ann Sullivan del Peru, Instituto Peruano de Análisis Conductual, and Universidad Peruana Cayetano Heredia. These courses, while not officially recognized certifications, do provide some education and training opportunities.

It is worth noting that there are no dedicated behavior analysis organizations in Peru. Nonetheless, there are ongoing efforts to establish official programs for behavior analysis at both undergraduate and graduate levels within government-run universities.

Puerto Rico

The profession behavior analyst is not a recognized or regulated profession in Puerto Rico. It is also not recognized by the State as a health profession, and there are no governmental guidelines regulating behavior-analytic services. However, as of March 2023, fourteen BCBA's, one BCaBA, and forty-nine RBTs were registered on the BACB website (see Table 1). While this number remains inadequate to meet the demand for services, it represents a significant improvement compared to 2014 when there were no certified professionals in Puerto Rico.

Behavior analysts in Puerto Rico are actively involved in various areas of practice, including early intervention for children with ASD, consultation services for schools, operation of private schools that integrate behavior analytic principles and strategies into their curricula, management of private ABA therapy companies, provision of supervision for professionals gaining fieldwork experience, and employment as staff members in private special education schools.

Puerto Rico has multiple laws that protect individuals who may receive ABA Services, albeit without specific mention of ABA services. These laws encompass a broad range of protective measures, including regulations ensuring the quality of healthcare services, patient privacy, and consumer protection in various healthcare professions. Examples of such legislation include the Letter of Rights and Responsibilities of the Patient Act, known as Law No. 194 (2000),

with subsequent amendments, Puerto Rico Health Insurance Administration Act Law No. 72 (1993), also amended. Also, Puerto Rico, being an unincorporated territory of the United States with official Commonwealth status, is subjected to federal laws such as the Individuals with Disabilities Education Act (2004) and the Health Insurance Portability and Accountability Act (1996).

At the local level, Puerto Rico has enacted Law No. 220 (2012), known as the *Ley para el Bienestar, Integración y Desarrollo de las Personas con Autismo* or BIDA (Law for the Well-being, Integration and Development of People with Autism). BIDA act aims to achieve several objectives: (1) establish public policy related to the needs of people with ASD, (2) promote early identification, diagnosis, and intervention, (3) provide for the creation of a Program of Family Support in Puerto Rico, (4) provide specialized continuing education for health professionals who work with people with this disorder, and (5) make provisions for covering mandatory medical treatment for the population with ASD.

Individuals with developmental disabilities, including ASD, have access to a variety of educational and health-care services that are covered by the Puerto Rico government's health plan, by the Department of Education as part of related services provided to special education students, and by private health insurances. Some of the commonly offered services include speech and language therapy, occupational therapy, physical therapy, psychological therapy, other mental health services, and medical services. Notably, the Puerto Rico government's health plan, known as ASES Vital, offers special coverage that includes services for individuals with ASD. Despite a high incidence of ASD in Puerto Rico (Cordero, et al., 2012), behavior analytic services for this population face significant challenges. These challenges stem from a lack of providers, the absence of graduate-level programs, limited availability of information and services related to ABA in Spanish, and a shortage of funding mechanisms. Furthermore, in Puerto Rico, ABA services are not categorized as a medical necessity, and behavior analysts are not recognized as health professionals. As a result, funding options for these services remain limited. Currently, the availability of health coverage for ABA services is extremely restricted.

Local health insurance providers are gradually recognizing ABA-based therapy as a covered service, with some of them introducing ABA CPT codes to their coverage. However, it is important to note that they do not consider BCBA as healthcare providers unless they possess another state-recognized health professional license, such as being a psychologist or speech-language pathologist. Despite multiple efforts by ABA service providers, there has not been an ABA company able to establish a contract with local health insurance companies to become

in-network, or in other words, to provide services under a formal agreement. Families do have the option to submit detailed summaries of service hours to their local health insurance companies, and some have successfully received partial reimbursement for ABA services. US federal health insurance companies such as TRICARE and Cigna, usually for federal employees and military personnel, cover ABA services in Puerto Rico and recognize BCBA as providers.

Presently, there are only two ABA companies with contracts to offer ABA services through federal health insurance companies. One of them has extended their contract from previous work in Florida, USA. For the most part, ABA services, when not privately funded by clients, are funded through the Puerto Rico Department of Education. The Special Education division of Puerto Rico's Department of Education includes ABA services as related services covered under the Individuals with Disabilities Education Act for children that participate in the special education program. Additionally, there is a non-profit organization that provides institutional grants for participants of their early intensive behavioral intervention (EIBI) program to ensure accessibility of services. Whether funded by the Department of Education, federal or local health insurance, institutional grants, or private funding, it is crucial to acknowledge that the access to ABA services is very limited, with a scarcity of service providers.

In 2021, a dedicated group of Puerto Rican behavior analysts came together to form the Puerto Rico Association for Behavior Analysis (PRABA). PRABA became an official ABAI affiliate chapter on July 22, 2022. Additionally, PRABA was officially incorporated as a nonprofit organization in Puerto Rico. This legal status allows PRABA to more easily advocate for changes in public policy, aiming to advance the profession and services of behavior analysis and ensure the well-being and rights of consumers in Puerto Rico. PRABA's mission also includes disseminating information about behavior analysis, as well as the local initiatives undertaken by behavior analysts to increase accessibility to ABA services in Puerto Rico, and establishing a cohesive professional community of behavior analysts. For instance, PRABA aims to work toward recognition of behavior analysis as a profession of health, work toward licensure for behavior analysts, and advocate for insurance coverage for ABA in Puerto Rico.

The board of directors at PRABA's have initiated actions toward these goals, including writing memorandums with professional insights concerning ABA services in Puerto Rico, encompassing needs, accessibility, and ongoing efforts. These documents serve to inform public policy and legislative work. PRABA is also participating in meetings with the Special Education division of Puerto Rico's Department of Education to promote ABA services as related

Table 2 Overview of behavior analysis in 15 Latin American countries

Country	Independent Profession	Professions Incorporating ABA	Governmental Guidelines for ASD Care	Governmental Services for ASD	Local Ethics Code	Official BA Training Programs	Local Training University/Vocational Level	BA Organizations	Development Plans
Argentina	No	PSY, SLP, OT, ED	Yes	Yes	No	No	Partial	No	DP, D, TR
Brazil	No	SLP, OT, PT, T	Yes	Yes	No	Yes	Yes	Yes	C
Chile	No	SLP, SET, PSY	Yes	Yes	No	Yes	Yes	Yes	D, ES
Colombia	No	OT, ST, PT, NA	Yes	Yes	No	No	No	Yes	D, RP, BSP
Costa Rica	No	OT, SLP, SET, CBP	Yes	Yes	No	No	Yes	No	Unknown
Cuba	No	MA, SNP, P, PSY, T	No ^a	Yes	No	No	No	No	Unknown
Dominican Republic	No	CP, SLP	Yes	Yes	No	Yes	Yes	In progress	DPO, C
Ecuador	No	ED, PSY, ST, OT	Yes	Yes	No	No	No	No	DA, RP, EC, C
Guatemala	No	SI, ST	Yes	Yes	No	Yes	Yes	No	D, C
Mexico	No	SP, OT, PT, T	Yes	Yes	Yes	No	Yes	Yes	D, C, E, AD
Nicaragua	No	PSY, SET, SLP	No ^a	Yes	No	No	No	No	D, E, DP, AD
Panama	No	PSY	No ^a	Yes	No	No	No	No	DPO, C, E, AD
Peru	No	PSY	Yes	Yes	No	No	Yes	No	DP
Puerto Rico	No	BA, PSY, SLPs, T	Yes	Partial	No	No	No	Yes	D, E, DP, AD
Venezuela	No	PSY	Yes	Yes	No	No	No	No	Unknown

Abbreviations for professions: *PSY* Psychologist, *SLP* Speech and Language Pathologists, *OT* Occupational Therapists, *ED* Educators, *PT* Physical Therapists, *T* Teachers, *SET* Special Education Teachers, *ST* Speech Therapists, *NA* Nursing Assistant, *BP* Behavioral Psychologists, *MA* Master in Autism, *SNP* Special Needs Psychiatrists, *P* Physicians = P, *CP* Clinical Psychologists, *SI* Sensory Integration, *SP* Speech Pathologists, *BA* Behavior Analysts (BCBA, QBA, IBA), *CBP* Cognitive Behavioral Psychologists. Abbreviations for development plans: *DP* Development of BA Programs, *D* Dissemination, *TR* Translation of Resources, *C* Certification, *ES* Education of Stakeholders, *RP* Regulation of the practice, *BSP* Become a Spokesperson of BA, *AD* Advocacy for BA, *DPO* Develop of Professional Organizations, *DC* Development of Certification, *DA* Development of Associations, *EC* Creation of Ethics Code, *E* Education

^a Not specifically, but under general disabilities.

^b General services

services covered under the Individuals with Disabilities Education Act. Furthermore, they are actively promoting continuing education and seminars for special education teachers and school psychologists.

Given that behavior analyst is not a recognized or regulated profession in Puerto Rico, there is currently no established local code of ethics. However, in the meantime, certified professionals adhere to the BACB code. PRABA is additionally starting necessary processes to promote regulation and licensing of the practice of applied behavior analysis in Puerto Rico with the goal of drafting an action plan toward licensure. As licensure and regulation of the practice of ABA in Puerto Rico has been identified as an important step toward improving accessibility and funding via local health insurances, it is a priority in PRABA's work plan. Additionally, PRABA is currently working toward the next ABA conference in Puerto Rico to be held in October 2024 to continue disseminating behavior analysis in Puerto Rico and to extend its reach to other Spanish-speaking communities. Furthermore, an important milestone on PRABA's horizon involves the development of official postgraduate training programs in behavior analysis, conducted in Spanish and offered by local universities. These programs will play a pivotal role in fostering the growth of ABA in Puerto Rico.

Venezuela

In Venezuela, the delivery of behavior analytic services falls under the purview of licensed psychologists. Licensed psychologists can register under the Federación de Psicólogos en Venezuela (Federation of Psychologists in Venezuela, <http://www.fpv.org.ve>) and must be registered in the School of Psychologists of their place of residence to legally practice psychology. Psychologists must abide by the Professional Ethical Code (1981) of the Federation of Psychologists in Venezuela. It is important to note that services delivered by psychologists or other professionals who work with individuals with ASD (e.g., teachers, pediatricians, occupational therapists, and language therapists) are not behavior analytic in nature. Currently, there are no governmental guidelines that mention ABA.

Regarding the establishment of laws that protect individuals who may receive ABA services or individuals with ASD, in August 2022, the National Assembly approved the Law for the Integral Attention for People with Autism Spectrum Disorders (*Ley para la Atención Integral a las Personas con Trastorno del Espectro Autista*, 2023), that aims to promote early diagnosis and services, the development of educational programs for this population, and to protect individuals with ASD from abuse. However, since there are no behavior-analytic services available, there are also no local codes

of ethics for the practice of behavior-analytic services that guide practitioners working with ASD populations.

Regarding official training programs for behavior analysts, the Universidad Central de Venezuela, located in Caracas, offers a specialization in behavior analysis. The purpose of this degree was to train professionals in functional and experimental analysis of behavior (UCV, n.d.). However, this degree is no longer offered and there are no other formal educational programs in the country. Some psychologists in Venezuela have sought professional training in applied behavior analysis through the online ABA certification offered by ABA España (<https://aba-elearning.com>). Currently, there are no behavior analysis organizations in Venezuela.

Concerning plans or next steps regarding the development of ABA in Venezuela, it is unknown. Sadly, many of the behaviorally inclined or trained faculty and professionals have either passed away or retired. The people they trained have either pursued other areas of work (e.g., general clinical psychology) or left the country. The sociopolitical climate of Venezuela over the past two decades has degraded higher education and made maintaining training programs at the master's and doctoral levels unsustainable. Those interested in the history of behavior analysis in Venezuela will find relevant information in Elcoro et al. (2024).

Conclusion

The present paper gathered information on the current state of regulations for the practice of ABA narrated by behavior analysts from 15 out of 33 Latin American countries.

As these brief reports show, behavior analysis is at different stages of development across these Latin American countries, facing various challenges and opportunities. As Table 2 shows, for most of the countries reported in this paper, behavior analysis is not recognized as a profession in its own right, and it is still considered a subfield of psychology, making the recognition of behavior analysis as a profession an important future goal. In addition, most countries still need to develop specific ethical and practice guidelines for the practice of behavior analysis, regardless of the ethical codes adhered to by practitioners (speech pathologists, psychologists, etc.). While some countries in Latin America have made progress in implementing coursework on behavior analysis at universities, there is still much to be done to ensure the proper use of this science across the region. A few countries have graduate-level programs focused on behavior analysis, although their content varies across universities and countries. However, the Latin American countries reported in this paper appear to recognize behavior analysis as an empirically based practice that can improve the lives of people with ASD, which could be used as a stepping point

to increase awareness and recognition of behavior analysis beyond the subfield of ASD.

The regulation of behavior analysis is crucial for the development and dissemination of evidence-based practices in Latin America. It is essential to establish the use of behavior analysis in a responsible and ethical manner, as more individuals, families, and organizations seek support for challenging behaviors and other complex conditions. The lack of regulation in these countries means that anyone can claim to be a behavior analyst without the necessary training, certification, or ethical oversight. This situation poses risks for individuals receiving behavioral services and the reputation of behavior analysis as a science.

After the BACB announced that it would no longer provide certifications to countries outside of the USA, Canada, Australia, and the UK (until 2025), behavior analysts in other countries have been seeking opportunities to continue disseminating and training others in their areas. Despite differences in regulation and laws surrounding the practice of behavior analysis in Latin American countries, practitioners of behavior analysis from most of them have collaborated on diverse projects such as translating relevant resources in behavior analysis, providing training, and disseminating behavior analysis in their local language.

To gain a better understanding of the current state of behavior analysis practice among certified professionals, we conducted a search from April 14 to 19, 2023, focusing on individuals with active certification from the BACB, IBAO, and QABA, using the search options available on their respective websites (see Table 1). We included all levels of certification from each credentialing board. Our findings show that Puerto Rico has the highest number of awarded certifications, followed by Brazil, Mexico, and Chile. Conversely, Cuba, Costa Rica, Nicaragua, and Venezuela have the lowest number of certified professionals. It is important to point out that one individual might hold multiple certifications, which can lead to an overestimation of people with certification within a country. It is worth noting that most individuals hold certification from the BACB, which is no longer available to professionals in these countries. This change could discourage those seeking certification or prompt them to explore alternative credentials such as IBAO and QABA, as the report of several countries shows.

Despite the challenges facing the recognition and advancement of behavior analysis in Latin America, there are encouraging signs of progress. In particular, new professional organizations have emerged with a dual focus on promoting the science and establishing professional standards for its practice. This suggests that there is a growing commitment to the field among Latin American practitioners. In addition to this, there are valuable lessons to be learned

from the paths taken in different countries that have led to an increase in the impact of BA. For instance, it is evident that to make a greater impact, behavior analysts must work at different levels, including creating course sequences at universities, providing training and mentoring to practitioners, disseminating ABA, and proving its efficacy in modifying socially significant behavior, thus creating demand from individuals seeking qualified professionals.

An excellent example of the relevance of community involvement can be seen in Brazil, where the public advocated that the government ensure ABA services are covered by health insurance. Such community involvement can significantly contribute to the expansion of ABA services, making them more accessible and affordable to individuals who need them. To increase the impact of behavior analysis, it is essential to work at various levels and involve the community. By following successful models from different countries and implementing community engagement strategies, behavior analysts can contribute to the growth and effectiveness of ABA services globally.

It is also important to highlight that international dissemination through various well-established organizations, such as ABAI and its initiatives (international chapters, special interest groups, Verified Course Sequences), has been crucial for disseminating behavior analysis in Latin America. Furthermore, initiatives by some ABAI regional chapters to offer tracks or presentations in Spanish bring the content closer to Latin America and Spanish-speaking countries (acknowledging that Spanish is not the only language spoken in Latin America). Another example of a global initiative is the World Behavior Analysis Day Alliance, which has ambassadors in different Latin American countries who have made an effort to disseminate the science and practice of behavior analysis. Maintaining these initiatives, ensuring they are culturally responsive, and making the information and activities they organize available through online platforms makes them more accessible to people worldwide. Additionally, the BACB has provided guidance and support for the dissemination of behavior analysis in some countries; it would be important to maintain this support, as there are still individuals holding various levels of certification from the BACB in Latin American countries.

Moving forward, there is reason to be optimistic that further opportunities for collaboration and growth within the discipline will emerge. By working together toward a common goal and learning from each other's experiences, as Latin-American scientist-practitioners, we can contribute to the identification of behavior analysis as a discipline, the regulation of practitioners of behavior analysis, the establishment of training programs, and the securing of coverage to ensure its continued success for years to come in Latin America.

Appendix

1. Does the profession of “behavior analyst” exist in your country? – If the answer is no, then: (a) Describe which professions have so far included the delivery of behavior analytic services in the focus of their practice, (b) Describe if there are any governmental guidelines that mention ABA or other areas/recommendations for the care of ASD individuals.
2. Are there any laws in your country that protect individuals who may receive ABA services? (e.g., Protection Law for Individuals with ASD).
3. Are behavior analytic services reimbursed or covered by local health care institutions? – If not, describe how these services are covered.
4. What type of services toward the ASD (or related) or other population that behavior analysts work with are covered by the government in your country?
5. Is there a local code (e.g., ethics code) for the practice of behavior-analytic services that guides practitioners?
6. Are there any official training programs for behavior analysts (e.g., VCS or others for QABA, IBAO certifications)? If not, then describe whether other local training exists at the university or vocational level?
7. Are there behavior analysis organizations in your country (e.g., professional); or Does your country have associations or chapters (e.g., ABAI)?
8. Describe plans or next steps regarding the development of Applied Behavior Analysis in your country.

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Data Availability This article does not have associated data due to the nature of the paper. Data for Table 1 are freely available on the websites of the different credentialing boards.

Declarations

Conflict of Interest Some authors are involved in the organizations mentioned throughout the paper.

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