



COLORADO

**Department of
Regulatory Agencies**

Colorado Office of Policy, Research &
Regulatory Reform

2020 Sunrise Review

Behavior Analysts



October 15, 2020



COLORADO

**Department of
Regulatory Agencies**

Executive Director's Office

October 15, 2020

Members of the Colorado General Assembly
c/o the Office of Legislative Legal Services
State Capitol Building
Denver, Colorado 80203

Dear Members of the General Assembly:

The General Assembly established the sunrise review process in 1985 as a way to determine whether regulation of a certain profession or occupation is necessary before enacting laws for such regulation and to determine the least restrictive regulatory alternative consistent with the public interest. Pursuant to section 24-34-104.1, Colorado Revised Statutes (C.R.S.), the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) at the Department of Regulatory Agencies (DORA) undertakes a robust review process culminating in the release of multiple reports each year on October 15.

A national leader in regulatory reform, COPRRR takes the vision of their office, DORA and more broadly of our state government seriously. Specifically, COPRRR contributes to the strong economic landscape in Colorado by ensuring that we have thoughtful, efficient and inclusive regulations that reduce barriers to entry into various professions, and that open doors of opportunity for all Coloradans.

As part of this year's review, COPRRR has completed its evaluation of the sunrise application for the regulation of Behavior Analysts and is pleased to submit this written report.

The report discusses the question of whether there is a need for regulation in order to protect the public from potential harm, whether regulation would serve to mitigate the potential harm and whether the public can be adequately protected by other means in a more cost-effective manner.

To learn more about the sunrise review process, among COPRRR's other functions, visit coprrr.colorado.gov.

Sincerely,

Patty Salazar
Executive Director



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Background

Sunrise Process

Colorado law, section 24-34-104.1, Colorado Revised Statutes (C.R.S.), requires that individuals or groups proposing legislation to regulate any occupation or profession first submit information to the Department of Regulatory Agencies (DORA) for the purposes of a sunrise review. The intent of the law is to impose regulation on occupations and professions only when it is necessary to protect the public health, safety or welfare. DORA's Colorado Office of Policy, Research and Regulatory Reform (COPRRR) must prepare a report evaluating the justification for regulation based upon the criteria contained in the sunrise statute:¹

- (I) Whether the unregulated practice of the occupation or profession clearly harms or endangers the health, safety, or welfare of the public, and whether the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument;
- (II) Whether the public needs, and can reasonably be expected to benefit from, an assurance of initial and continuing professional or occupational competence;
- (III) Whether the public can be adequately protected by other means in a more cost-effective manner; and
- (IV) Whether the imposition of any disqualifications on applicants for licensure, certification, relicensure, or recertification based on criminal history serves public safety or commercial or consumer protection interests.

Any professional or occupational group or organization, any individual, or any other interested party may submit an application for the regulation of an unregulated occupation or profession. Applications must be accompanied by supporting signatures and must include a description of the proposed regulation and justification for such regulation.

Methodology

During the sunrise review process, COPRRR staff performed a literature search; contacted and interviewed the sunrise applicant; reviewed licensure laws in other states; and interviewed stakeholders, including behavior analysts and representatives from state governmental agencies and advocacy organizations. To determine the number and types of complaints filed against behavior analysts in Colorado, COPRRR staff contacted the Division of Professions and Occupations in the Department of

¹ § 24-34-104.1(4)(b), C.R.S.

Regulatory Agencies, the Office of the Colorado Attorney General, and the Behavior Analyst Certification Board.

Profile of the Profession

A behavior analyst (BA) implements applied behavior analysis (ABA). According to *Psychology Today*, ABA is therapy focused on changing behaviors. The behaviors could be social skills, communication, reading, and academics but also include adaptive learning skills, such as fine motor dexterity, hygiene, grooming, domestic capabilities, punctuality, and job competence.² Therapists who use ABA recognize that behavior is learned and can be changed. The therapist develops a treatment plan to improve the communication and skills needed by clients to live their lives.³

ABA is based on the notion that behavior comes from circumstances. A person's behavior is chiefly influenced by what occurs after he or she acts a certain way. The methods BAs employ attempt to change behavior by emphasizing the consequences of the behavior. The Behavior Analyst Certification Board states that ABA has been empirically shown to be effective in a wide variety of areas such as Autism Spectrum Disorder and other intellectual disorders.⁴

ABA evolved from the behaviorist research and teachings of B.F. Skinner. The American Psychological Association ranked Skinner the number one psychologist of the 20th century. He ranked higher than well-known names like Freud (number 3), Maslow (number 10), and Jung (number 23).⁵ Skinner separated behaviors into two different types:⁶

- Respondent behavior - Subconscious behaviors resulting from direct stimulation, such as a dog salivating when presented with food.
- Operant behavior - Behaviors not initially prompted by a stimulus, but which may be reinforced by environmental conditioning.

Skinner's behaviorism is the foundation for ABA. Testing behaviors experimentally and analyzing them based on effective actions, is basically what has become ABA stressing function over form.⁷

Analysts who use ABA recognize how behaviors are learned and how they can be changed. The analyst evaluates behavior and formulates strategies to develop the skills necessary for a client's success in changing. To achieve optimal success, ABA involves continued monitoring and evaluation.⁸ BAs are recognized for helping children with

² *Psychology Today. Applied Behavior Analysis*. Retrieved January 3, 2020, from <https://www.psychologytoday.com/us/therapy-types/applied-behavior-analysis>

³ *ibid.*

⁴ Behavior Analyst Certification Board. *About Behavior Analysis*. Retrieved January 3, 2020, from <https://www.bacb.com/about-behavior-analysis/>

⁵ American Psychological Association. *Eminent psychologists of the 20th century*. Retrieved January 6, 2020, from <https://www.apa.org/monitor/julaug02/eminent>

⁶ AppliedBehaviorAnalysisEdu.org. *Who is BF Skinner*. Retrieved January 6, 2020, from <https://www.appliedbehavioranalysisedu.org/who-was-bf-skinner/>

⁷ *ibid.*

⁸ *Psychology Today. Applied Behavior Analysis*. Retrieved January 6, 2020, from <https://www.psychologytoday.com/us/therapy-types/applied-behavior-analysis>

autism, Attention Deficit and Hyperactivity Disorder, and other disabilities succeed in the school setting. Beyond those situations, BAs work in areas such as brain injury rehabilitation, behavioral gerontology, sports psychology, substance abuse treatment, and a wide range of clients with the aim to increase quality of life.⁹

The Colorado Association for Behavior Analysis (Applicant) contends the major difference between the “talk therapy” that most mental health professionals practice and ABA is the timing of precursor stimuli. The non-ABA approach emphasizes helping a client cope with past conditions and occurrences. The ABA approach identifies current activity that triggers a reaction. It addresses the reaction by modifying either the cause or the consequences of the reaction.

The Applicant elaborates,¹⁰

In general, BAs conduct assessments to determine (a) which skills need to be taught to clients to help them achieve their goals (for skill-building cases) and (b) the reasons why maladaptive behavior might be occurring (for behavior reduction cases). Treatments based on changing features of the environment are then carefully designed and implemented, which often includes the training of individuals responsible for carrying out treatment plans (e.g., parents, teachers, staff). BAs include features in their treatment plans to increase the likelihood of treatment effects transferring across relevant settings and maintaining over time. BAs also collect data before, during, and after treatment in order to make evidence-based decisions about treatment changes and/or discontinuation.

The U.S. Bureau of Labor Statistics groups substance abuse, behavioral disorder, and mental health counselors into the same occupational classification. It states that in 2018, Colorado had the fifth highest number of these professionals among U.S. states and the annual mean wage was \$48,490.¹¹ The Behavior Analyst Certification Board (BACB) estimates that in June 2020 there were 826 certified BAs in Colorado. The Applicant expects, based on historic growth numbers, the number of certified BAs in the state to grow between 15 and 24 percent during the next five years.¹²

BAs work in varied settings.¹³ Some work in mental health clinics to help clients deal with social, personal and academic problems. Clinical BAs identify adverse

⁹ Azusa Pacific University. *Adding a Behavior Analyst Certification to Your Master’s Degree*. Retrieved June 8, 2020, from <https://www.apu.edu/articles/adding-a-behavior-analyst-certification-to-your-masters-degree/>

¹⁰ Behavior Analyst sunrise Application. p.3.

¹¹ US Bureau of Labor Statistics. *Occupational Employment and Wages, May 2018 21-1018 Substance Abuse, Behavioral Disorder, and Mental Health Counselors*. Retrieved January 9, 2020, from <https://www.bls.gov/oes/current/oes211018.htm#ind>

¹² Behavior Analyst Sunrise Application. p. 2.

¹³ Applied Behavior Analysis Program Guide. *What are the Most Common Job Settings for a Behavior Analyst?* Retrieved January 14, 2020, from <https://www.appliedbehavioranalysisprograms.com/faq/what-are-the-most-common-job-settings-for-a-behavior-analyst/>

circumstances that contribute to behavior in need of modification and then develop management techniques and interventions.

Other BAs work in facilities that target specific conditions such as autism or other disorders. They target maladaptive behaviors so they can increase the development of proper social and academic skills. They also provide support for teachers and parents. Some of the BAs who work in mental health centers collect and analyze patient data at a high level to increase understanding of certain conditions and behaviors.

BAs also work in public schools as ABA specialists. These professionals administer programs that target client groups with behavioral problems or learning or developmental disabilities. BAs instruct children concerning proper play, social, academic and communication skills. BAs in public schools record data, draw conclusions, and make recommendations to educators, parents and case managers.

Other job settings include non-profit centers, health-care organizations and human services departments.

Credentiaing

The BACB credentials individuals who work with ABA. The BACB certifies Registered Behavior Technicians, Board Certified Assistant Behavior Analysts, Board Certified Behavior Analysts, and Board Certified Behavior Analysts-Doctoral. Registered Behavior Technicians and Board Certified Assistant Behavior Analysts must be supervised by a person credentialed at a higher level.¹⁴

Registered Behavior Technician

The Registered Behavior Technician performs under the supervision of an individual certified at a higher level. A Registered Behavior Technician does not design intervention or assessment plans; he or she implements behavior analytic services as determined by the supervisor.¹⁵

To become a BACB Registered Behavior Technician, a person must:¹⁶

- Be 18 years old,
- Have a high school diploma or equivalent at the time of application,
- Undergo a background check within 180 days of application,

¹⁴ *Psychology Today. Applied Behavior Analysis*. Retrieved January 6, 2020, from <https://www.psychologytoday.com/us/therapy-types/applied-behavior-analysis>

¹⁵ Behavior Analyst Certification Board. *Registered Behavior Technician*. Retrieved January 10, 2020, from <https://www.bacb.com/rbt/>

¹⁶ Behavior Analyst Certification Board. *RBT Requirements*. Retrieved January 9, 2020, from <https://www.bacb.com/rbt/rbt-requirements/>

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- Complete 40 hours of training that includes,¹⁷
 - Measurement,
 - Assessment,
 - Skills acquisition,
 - Behavior reduction,
 - Documentation and reporting, and
 - Professional conduct and scope of practice.
 - Pass an initial competency assessment, and
 - Pass an examination.

The certification examination maybe taken at authorized Pearson VUE testing sites. The examination has 85 multiple-choice questions. Ten of the questions are unscored pilot questions. A candidate has 90 minutes to complete it.¹⁸ The average passing rate for those who took the examination for the first time between 2015 and 2019 was 87 percent.¹⁹

The BACB application processing fee is \$50 and the examination fee is \$45.²⁰

Renewal of the certification requires passing a renewal competency assessment and adhering to supervision and ethics requirements.²¹ The BACB reported that in June 2020 there were 1,945 Registered Behavior Technicians in Colorado.

Board Certified Assistant Behavior Analyst

The Board Certified Assistant Behavior Analyst is an undergraduate-level certification. These individuals provide ABA services but must be supervised by a Board Certified Behavior Analyst. A credential at this level allows an individual to supervise Registered Behavior Technicians.²²

Qualifying for certification requires an acceptable bachelor's degree, acceptable coursework in behavior analysis, and supervised practical experience. After January 1, 2022, a bachelor's degree from an Association for Behavior Analysis International-accredited program will also qualify a candidate.²³ The only school that has such a program in Colorado is the University of Colorado Denver.²⁴

¹⁷ Behavior Analyst Certification Board. *RBT Task List (2nd ed.)*. Retrieved January 9, 2020, from https://www.bacb.com/wp-content/uploads/RBT-2nd-Edition-Task-List_181214.pdf

¹⁸ Behavior Analyst Certification Board. *RBT Handbook*. P.8. Retrieved July 15, 2020, from, https://www.bacb.com/wp-content/uploads/2020/05/RBTHandbook_200519.pdf

¹⁹ Behavior Analyst Certification Board. *Examination Information*. Retrieved July 15, 2020, from <https://www.bacb.com/examination-information/>

²⁰ Behavior Analyst Certification Board. *RBT Handbook*. P.7. Retrieved July 15, 2020, from https://www.bacb.com/wp-content/uploads/2020/05/RBTHandbook_200519.pdf

²¹ Behavior Analyst Certification Board. *RBT Requirements*. Retrieved January 9, 2020, from <https://www.bacb.com/rbt/rbt-requirements/>

²² Behavior Analyst Certification Board. *Board Certified Assistant Behavior Analyst*. Retrieved January 10, 2020, from <https://www.bacb.com/bcaba/>

²³ *Ibid.*

²⁴ Association for Behavior Analysis International. *Verified Course Sequence Directory*. Retrieved July 15, 2020, from <https://www.abainternational.org/vcs/directory.aspx>

Once the qualifications have been met, a candidate may apply for certification by filling out an application, submitting all necessary documentation, paying an application fee (\$175), and passing an examination. The examination fee is \$125 and Pearson Vue proctors the examination.²⁵ The examination has 140 multiple-choice questions and 10 of those are ungraded pilot questions. A candidate has four hours to complete the examination.²⁶ The average passing rate for those who took the examination for the first time between 2015 and 2019 was 65 percent.²⁷

Once certified, to remain so, a Board Certified Assistant Behavior Analyst must complete continuing education, adhere to the BACB's ethics and self-reporting requirements,²⁸ meet supervision standards, and submit a recertification application and associated fees (\$140) every two years.²⁹ The BACB reported that in June 2020 there were 65 Board Certified Assistant Behavior Analysts in Colorado.

Board Certified Behavior Analyst

A Board Certified Behavior Analyst is an independent practitioner who provides behavior analysis services. Certification at this level allows for the supervision of Registered Behavior Technicians, Board Certified Assistant Behavior Analysts, and any others who implement ABA.³⁰ Board Certified Behavior Analysts are for whom the Applicant is pursuing licensure.

There are several ways to qualify as a Board Certified Behavior Analyst:³¹

- Behavior-Analytic Coursework
 - A master's or doctoral degree in behavior analysis, education, or psychology; acceptable graduate coursework in behavior analysis; and supervised practical experience.
- Faculty Teaching and Research
 - A master's or doctoral degree in behavior analysis, education, or psychology; A graduate level faculty appointment at a qualifying institution, teaching acceptable coursework full-time at least three out of five years, and one published article; and supervised practical experience.

²⁵ Behavior Analyst Certification Board. *Board Certified Assistant Behavior Analyst*. Retrieved January 10, 2020, from <https://www.bacb.com/bcaba/>

²⁶ Behavior Analyst Certification Board. *Examination Information*. Retrieved July 15, 2020, from <https://www.bacb.com/examination-information/>

²⁷ Behavior Analyst Certification Board. *Examination Information*. Retrieved July 15, 2020, from <https://www.bacb.com/examination-information/>

²⁸ In accordance with the BACB ethics requirements outlined in the Professional and Ethical Compliance Code for Behavior Analysts and the RBT Ethics Code, applicants and certificants must provide the BACB with information that could impact its ability to effectively communicate with them or that might influence their status or certification. Behavior Analyst Certification Board. *Board Certified Assistant Behavior Analyst*. Retrieved January 9, 2020, from https://www.bacb.com/ethics/#ethics_reporting

²⁹ Behavior Analyst Certification Board. *Board Certified Assistant Behavior Analyst*. Retrieved January 10, 2020, from <https://www.bacb.com/bcaba/#BCaBAMaintain>

³⁰ Behavior Analyst Certification Board. *Board Certified Behavior Analyst*. Retrieved January 13, 2020, from <https://www.bacb.com/bcaba/>

³¹ Behavior Analyst Certification Board. *Board Certified Behavior Analyst*. Retrieved January 13, 2020, from <https://www.bacb.com/bcaba/#BCBAEligibilityRequirements>

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- Postdoctoral experience
 - A qualifying doctoral degree in behavior analysis, education, or psychology; 10 years of postdoctoral experience practicing behavior analysis with a state-issued license or national professional credential; and 500 hours of acceptable supervised independent fieldwork beginning after completion of the postdoctoral experience.
 - Association for Behavior Analysis International Accredited Program (available after January 1, 2022)
 - A master's or doctorate degree from an Association for Behavior Analysis International Accredited Program and completion of required fieldwork. There are three such accredited programs in Colorado (University of Colorado Colorado Springs, University of Colorado Denver, and University of Northern Colorado).³²

Once an individual has qualified, he or she may apply and sit for the certification examination. The application fee is \$245 and the examination fee is \$125. Pearson Vue proctors the examination. A candidate may retake the examination within two years of initial application approval. The application fee is \$140.³³ The examination has 160 multiple-choice questions and 10 of those are ungraded pilot questions. Each candidate has four hours to complete the examination. The average passing rate for those who took the examination for the first time between 2015 and 2019 was 65 percent.³⁴

Continued certification requires completing continuing education, adherence to the BACB's ethics and self-reporting requirements, meeting supervision standards, and submitting a recertification application with associated fees (\$215) every two years. The BACB reported that in June 2020 there were 826 Board Certified Behavior Analysts in Colorado this total includes those who have the Board Certified Behavior Analyst-Doctoral credential.

Board Certified Behavior Analyst - Doctoral

A Board Certified Behavior Analyst who has doctoral training in ABA may be titled at this designation (BABC-D). However, this is not a separate certification, it does not grant any privileges beyond the Board Certified Behavior Analyst certification, and the positions function the same. There are three methods to acquire the designation:

- Hold an active certification as a Board Certified Behavior Analyst and a doctorate degree from Association for Behavior Analysis International Accredited Program;
- Hold an active certification as a Board Certified Behavior Analyst, possess a doctorate degree from a qualified institution, acquire 1,800 hours in ABA during

³² Association for Behavior Analysis International. *Verified Course Sequence Directory*. Retrieved July 15, 2020, from <https://www.abainternational.org/vcs/directory.aspx>

³³ Behavior Analyst Certification Board. *Board Certified Behavior Analyst*. Retrieved January 13, 2020, from <https://www.bacb.com/bcba/#BCBAApply>

³⁴ Behavior Analyst Certification Board. *Examination Information*. Retrieved July 15, 2020, from <https://www.bacb.com/examination-information/>

a fellowship or postdoctoral employment while supervised by a Board Certified Behavior Analyst, and write two peer-reviewed journal articles based in behavior analysis; and

- Hold an active certification as a Board Certified Behavior Analyst, hold a doctorate degree from a non-accredited program but the dissertation was behavior-analytic, plus:
 - Four behavior-analytic courses as part of the doctoral program of study;
 - Supervision by faculty who held a Board Certified Behavior Analyst certification and met the supervisor qualification criteria in place at that time; or
 - Authored two peer-reviewed journal articles based in behavior analysis.

Once qualified an individual must submit an application fee (\$105), and, if qualified, the BACB will approve the application. Continued certification has the same process as the Board Certified Behavior Analyst credential. The fee is \$290.

Proposal for Regulation

The Colorado Association for Behavior Analysis (Applicant) submitted a sunrise application in accordance with section 24-34-104.1, Colorado Revised Statutes (C.R.S.). The sunrise process places the onus on the applicant to illustrate the need for regulation by demonstrating that:³⁵ the unregulated practice of the occupation or profession clearly harms or endangers the public, the harm is easily recognizable, and the public will value from the state's assurance of initial and continuing competence.

The Applicant posits that licensing should be established because the Behavior Analyst Certification Board (BACB) has no mechanism to discipline non-member practitioners, only those members who are certified. The application implies that BACB certification be part of any behavior analyst (BA) regulatory framework.

The Applicant did not offer any disqualifications specific to BA applicants but suggested disqualifications should comport with other regulated mental health professions.

In conjunction with this sunrise review application, the Applicant also submitted an application for mandatory continuing education (MCE) required by section 24-34-901, C.R.S. Though it is not explicit in the application, the implication is that the MCE requirements of the BACB should be adopted and any BACB certification should be maintained. The MCE requirements are as follows:

- Board Certified Assistant Behavior Analyst – 20 units within each two-year recertification cycle, including four units in ethics and three units in supervision (for supervisors);³⁶ and
- Board Certified Behavior Analyst and Board Certified Behavior Analyst-Doctoral – 32 units within each two-year renewal cycle, including four units in ethics and three units in supervision (for supervisors).³⁷

³⁵ § 24-34-104.1(4)(b), C.R.S.

³⁶ Behavior Analyst Certification Board. *Board Certified Assistant Behavior Analyst*. Retrieved January 21, 2020, from <https://www.bacb.com/bcaba/#BCaBACEUs>

³⁷ Behavior Analyst Certification Board. *Board Certified Behavior Analyst*. Retrieved January 21, 2020, from <https://www.bacb.com/bcba/#BCBACEUs>

Summary of Current Regulation

Federal Laws and Regulations

The Colorado Office of Policy, Research, and Regulatory Reform could not find any federal laws that regulate applied behavior analysis (ABA).

The Colorado Regulatory Environment

The Colorado Department of Health Care Policy and Financing requires a person providing ABA to have a BACB credential to be eligible for Medicaid reimbursement. However, there are no Colorado laws that specifically regulate ABA.

The Colorado Revised Statutes (C.R.S.) mental health statutes regulate multiple types of mental health professionals, including:

- Psychologists,
- Social workers,
- Marriage and family therapists,
- Professional counselors,
- Unlicensed psychotherapists, and
- Addiction counselors.

Each of the listed regulated professions has its own qualifications for licensure and its own scope of practice enforced by a regulatory board consisting of professional peers and members of the public. The boards often address similar issues and are governed under the same set of general statutes with each also having its own profession-specific laws. While some of these licensed professions may occasionally perform ABA, when qualified, they may also provide psychotherapy and psychotherapy services to varying degrees. According to section 12-245-202(14)(a), C.R.S.:

“Psychotherapy” or “psychotherapy services” means the treatment, diagnosis, testing, assessment, or counseling in a professional relationship to assist individuals or groups to alleviate behavioral and mental health disorders, understand unconscious or conscious motivation, resolve emotional, relationship, or attitudinal conflicts, or modify behaviors that interfere with effective emotional, social, or intellectual functioning. Psychotherapy follows a planned procedure of intervention that takes place on a regular basis, over a period of time, or in the cases of testing, assessment, and brief psychotherapy, psychotherapy can be a single intervention.

The statute also states the General Assembly intended that this definition, “be interpreted in its narrowest sense to regulate only those persons who clearly fall within

the definition set forth in this subsection.” Nonetheless, this definition of psychotherapy is so broad and the inclusion of unlicensed psychotherapist regulation effectively precludes any other, newer, professions from being acknowledged as different. Statute requires:³⁸

Any person not otherwise licensed, registered, or certified ... who is practicing psychotherapy in this state shall register with the board (of unlicensed psychotherapists) by submitting his or her name, current address, educational qualifications, disclosure statements, therapeutic orientation or methodology, or both, and years of experience in each specialty area.

However, pursuant to the Division of Professions and Occupations’ interpretation of House Bill 20-1206, no one not already registered as an unlicensed psychotherapist as of July 14, 2020, may register.

Generally, psychotherapy is associated with “talk” therapy or counseling and listening versus ABA, which observes, assesses, teaches, and alters environment to change behaviors. The legal definitions of psychology,³⁹ social work,⁴⁰ marriage and family therapy,⁴¹ licensed professional counseling,⁴² and addiction counseling all include elements of ABA. Some licensed mental health professions and professionals may practice ABA; in fact, many individuals certified by the Behavior Analyst Certification Board (BACB) are psychologists. Regardless, the mental health practice statutes unequivocally prohibit any mental health practitioners from practicing, “outside of or beyond his or her area of training, experience, or competence.”⁴³ Therefore, if Colorado-licensed mental health professionals practice ABA, they must be trained and competent to do so. If they are not, they may be subject to discipline by mental health regulators.

Regulation in Other States

The sunrise application states that 30 states credential behavior analysts (BAs). The Applicant provided data indicating that 29 of the 30 states issue a license and only Ohio issues a certification. Approximately one-quarter, 23 percent, of the licensure states—Arizona, Connecticut, Hawaii, Maryland, Ohio, South Dakota, and Wisconsin—require an advanced degree for a credential. Table 1 indicates the states that regulate BAs, the type of credential issued, and whether a BACB-issued certification or registration is required to obtain a credential.

³⁸ § 12-245-703(3), C.R.S.

³⁹ § 12-245-303(2), C.R.S.

⁴⁰ § 12-245-403(2), C.R.S.

⁴¹ § 12-245-503(2), C.R.S.

⁴² § 12-245-603(2), C.R.S.

⁴³ § 12-245-203(1), C.R.S.

Table 1
BA Credentialing by State⁴⁴

State	Behavior Analyst	Assistant Behavior Analyst	Registered Technician	BACB credential required
Alabama	License	License	None	Yes
Alaska	License	License	None	No
Arizona	License	None	None	No
Arkansas	None	None	None	None
California	None	None	None	None
Colorado	None	None	None	None
Connecticut	License	None	None	Yes
Delaware	None	None	None	None
District of Columbia	None	None	None	None
Florida	None	None	None	None
Georgia	None	None	None	None
Hawaii	License	None	None	Yes
Idaho	None	None	None	None
Illinois	None	None	None	None
Indiana	None	None	None	None
Iowa	License	License	None	Yes
Kansas	License	License	None	Yes
Kentucky	License	License	None	Yes
Louisiana	License	Certification	Registration	No
Maine	None	None	None	None
Maryland	License	None	None	Yes
Massachusetts	License	License	None	No
Michigan	License	License	None	Yes
Minnesota	None	None	None	None
Mississippi	License	License	None	Yes
Missouri	License	License	None	Yes
Montana	License	License	None	Yes
Nebraska	None	None	None	None
Nevada	License	License	None	Yes
New Hampshire	None	None	None	None
New Jersey	None	None	None	None

⁴⁴ Association of Professional Behavior. *Licensure and Other Regulation of ABA Practitioners, Summary of Current Laws to License or Otherwise Regulate ABA Practitioners*. Retrieved March 12, 2020, from, https://cdn.ymaws.com/www.apbahome.net/resource/resmgr/State_Regulation_of_BA_Nov20.pdf (Updated information by COPRRR analyst March 12. 2020)

State	Behavior Analyst	Assistant Behavior Analyst	Registered Technician	BACB credential required
New Mexico	None	None	None	None
New York	License	Certification	None	No
North Carolina	None	None	None	None
North Dakota	License	Registration	None	No
Ohio	Certification	None	None	No
Oklahoma	License	Certification	None	No
Oregon	License	License	None	No
Pennsylvania	None	None	None	None
Rhode Island	License	License	None	Yes
South Carolina	None	None	None	None
South Dakota	License	None	None	Yes
Tennessee	License	License	None	Yes
Texas	License	License	None	No
Utah	License	License	None	Yes
Vermont	License	License	None	No
Virginia	License	License	None	Yes
Washington	License	License	Certification	No
West Virginia	None	None	None	None
Wisconsin	License	None	None	Yes
Wyoming	None	None	None	None

- Shading indicates that there is no regulation in that state.

Of the 30 states that require a credential, 18, 60 percent, require a BACB qualification as a prerequisite. Only two states, Louisiana and Washington, confer a credential to behavior technicians.

Analysis and Recommendations

Public Harm

The first sunrise criterion asks:

Whether the unregulated practice of the occupation or profession clearly harms or endangers the health, safety, or welfare of the public, and whether the potential for harm is easily recognizable and not remote or dependent on tenuous argument.

The Colorado Association for Behavior Analysis (Applicant) states in the application that:

[Applicant] is seeking to better protect the public, including vulnerable client populations, by ensuring that all behavior analysts and persons masquerading as a behavior analyst are regulated by the state via licensure.

The purpose of this section of the sunrise report is to determine if, and to what degree, those acting as behavior analysts (BAs) harm consumers of applied behavior analysis (ABA). Harm in this context is when a consumer suffers injury to his or her health, safety, or welfare due to the conduct of a BA.

The Applicant asserts that BAs often work with vulnerable populations who may have cognitive or communicative deficits that could interfere with their ability to report abuse and neglect. BAs also may work in client homes without direct supervision.

The Applicant submitted the following cases to illustrate the harm that occurs because BAs are not licensed:

Case I: From 2007-2008, Connecticut.⁴⁵

A New York woman used forged credentials to defraud more than \$150,000 from families with autistic children and a Connecticut school system. She was sentenced to three years in prison. The judge in the case also blamed those in the school system who allowed her to pose as a Board Certified Behavior Analyst without verifying credentials.

The woman posed as a Board Certified Behavior Analyst and told school officials she had two master's degrees and a doctorate. The school district hired her as a specialist on autism treatment services. Victims paid her for specialized

⁴⁵ Jeff Morganteen, "Phony autism specialist sentenced to three years in prison." *Stamford Advocate*. Retrieved April 24, 2020, from, <https://www.stamfordadvocate.com/news/article/Phony-autism-specialist-sentenced-to-three-years-734681.php>

treatment for their autistic children. One parent became suspicious and checked the online BACB registry and there were no records. The victims alleged her lack of qualifications with autism treatment stunted the development of their children.

Analysis

The school district was harmed when it was defrauded thousands of dollars by a person posing as a credentialed BA. Nonetheless, if the school district had checked the validity of the credentials, then the person would not have been hired and no financial harm would have occurred. Additionally, fraud is not directly related to the issues of competency that licensing typically addresses.

Though the parents of the autistic children alleged her lack of qualifications inhibited the progress of their children, there is no way to determine if progress was actually inhibited or the extent of harm if it did occur. This does not represent harm that is “easily recognizable and not remote or dependent on tenuous argument” as is the sunrise review standard.

Case II: From 2011 and 2015, New Jersey.⁴⁶

A special education consultant who held a Marriage and Family Therapist license in New Jersey and advertised as an ABA therapist, pleaded guilty to touching the genitals of eight children and submitting fraudulent insurance claims. According to BACB records, he held no BACB credential.

The therapist admitted to having sexual contact with eight children under the age of 13 while he served as their behavioral therapist. He also admitted to billing insurance companies for treatment he did not provide. The abuse occurred multiple times between 2011 and 2015.

Analysis

The children were assaulted by a trusted special education consultant and were undoubtedly harmed, as was the insurance company that paid the claims. It is unclear how holding a BA license would have changed the circumstances. The person who committed the crimes was licensed by the state as a Marriage and Family Therapist. It is doubtful that an additional license would have protected those who were harmed.

⁴⁶ NJ.com. *Special education consultant gets 10 years for sexually assaulting kids, fraud.* Retrieved April 24, 2020, from https://www.nj.com/sussex-county/2016/09/special_education_consultant_gets_10_years_for_sex.html

Case III: From 2017, Oregon.⁴⁷

A behavioral therapist was found guilty of sexually assaulting the 13-year-old autistic boy with whom she was working. The sexual abuse occurred during visits to the victim's home. They often met in his room, behind closed doors. The therapist worked for an organization that has facilities in several states and specializes in ABA.⁴⁸ The jury found that on each count, the victim was vulnerable and the BA violated her professional responsibilities.

Oregon requires BAs to be licensed and have a BACB credential.⁴⁹ Licensing in Oregon began in 2013.

Analysis

This case clearly exhibits harm. However, the therapist presumably held a state license and a BACB credential when she committed the crimes. Licensure was not a deterrent to these criminal acts. Conviction of the crime would prevent her from keeping the license and practicing in the future.

The Applicant provided one other online case to illustrate harm but the link it provided did not connect to a website. The Applicant explained that it was an old case that is no longer available.

In addition to the above cases, the Applicant provided two academic studies that described links between a lack of formal training and poor ABA outcomes.

The first of the academic works found parent-managed outcomes of early intensive intervention for autism were not as positive as those conducted by clinicians.⁵⁰ The second study analyzed treatment “integrity failures” which are treatment in natural settings employed by individuals with little or no specific ABA training. Among its findings were that those integrity failures, “might result in the long-term strengthening of problem behavior or, conversely, in the further strengthening of appropriate behavior.”⁵¹

⁴⁷ The Oregonian. *Behavioral therapist, 28, found guilty of raping, sexually abusing 13-year-old autistic boy in her care*. Retrieved April 24, 2020, from <https://www.oregonlive.com/crime/2019/03/behavioral-therapist-28-found-guilty-of-raping-sexually-abusing-13-year-old-autistic-boy-in-her-care.html>

⁴⁸ Footprints Behavioral Interventions. *Locations*. Retrieved April 24, 2020, from <https://www.autismfootprints.com/contact-us/>

⁴⁹ Oregon.gov. *Behavior Analysis Regulatory Board - License Information*. Retrieved April 27, 2020, from <https://www.oregon.gov/oha/PH/HLO/Pages/Board-Behavior-Analysis-Regulatory-License.aspx>

⁵⁰ Bibby, P., Eikeseth, S., Martin, N. T., Mudford, O. C., & Reeves, D. (2002). Progress and outcomes for children with autism receiving parent-managed intensive interventions. *Research in Developmental Disabilities, 23*, 81-104.

⁵¹ Fryling, M. J., Wallace, M. D., & Yassine, J. N. (2012). “Impact of treatment integrity on intervention effectiveness.” *Journal of Applied Behavior Analysis, 45*, 449-453.

Analysis

Both of the works point to BA training as a positive variable regarding the success of treatment. However, neither study points to an objective harm or harm that is “easily recognizable and not remote or dependent on tenuous argument.” They indicate that success rates are somewhat higher for a board certified BA compared to a layperson. One must subjectively conclude anything beyond those findings. As with treatments in many areas, there is no guarantee of success when a board certified individual uses ABA. These studies do not rise to the sunrise statute level that determining harm is not dependent on tenuous argument, because there is equivocation in their conclusions. Therefore, the predictability of consumers being harmed is not easily recognizable.

Beyond the cases submitted by the Applicant, the Colorado Office of Policy, Research, and Regulatory Reform (COPRRR) inquired of the Division of Professions and Occupations (Division) whether any mental health licensees had been disciplined for practicing outside of his or her training or below expected standards with regard to ABA. Staff could not recall such a case. Regulatory boards that are housed in the Division govern psychologists, social workers, marriage and family therapists, professional counselors, unlicensed psychotherapists, and addiction counselors, many of whom provide ABA services.

Looking for consumer harm, COPRRR studied the sunrise review performed in 2018. While the Applicant submitted additional cases in 2018, there is substantial overlap among the cases. The analyses come to similar conclusions.

COPRRR also contacted the Colorado Department of Health Care Policy and Finance (HCPF) and several mental health advocacy groups to uncover any evidence of consumer harm. While some of the advocacy groups encouraged increasing oversight and regulation, none pointed to harm as a justification for such an increase. HCPF did not relate any cases of consumer harm.

Additionally, COPRRR contacted the BACB Ethics and Regulatory Departments to determine if harm occurs and the nature of the harm. Though the departments could not relate specific case information, they related some general observations about the harm that they encounter. Most BACB complaints involve obtaining a credential fraudulently; not providing continuity of service, which means using treatments outside of ABA or a partial treatment; having a non-sexual multiple or exploitive relationship, which is similar to influencing a conflict of interest with a client; and not keeping accurate records.

The BACB explained that the violations often involve individuals that hold multiple mental health profession credentials, those who are newly certified, or longer tenured BAs who have not kept up with practice standards.

The BACB Ethics Department pointed out that it also sees complaints that involve professional administrative issues such as billing fraud. It also noted that there has been a marked increase in the number of complaints since the BACB adopted a new code in 2016. During 2016-2017, the most common disciplinary consequence issued was corrective action, 41 times, and the BACB exercised certification revocation 8 times.⁵² These data are national in scope and the BACB certifies several thousand individuals. Therefore, while there are instances when discipline is necessary, those instances are extremely rare.

Additional Harm

Close to the end of the research phase of this sunrise review, multiple clients and practitioners of ABA services contacted COPRRR to share stories regarding ABA-associated harm. In some of those cases, harm occurred. The following story, relayed by a Board Certified Behavior Analyst, is representative of this collection of communications:

I was the BCBA on the case for an 8-year old client with comorbid epilepsy in addition to Autism Spectrum Disorder/Attention Deficit Hyperactivity Disorder. He transferred to my agency from another. I went to present a game - Sorry - to play with him and he immediately began to cry. I asked him what was going on and he told me that when his previous company presented games to him, if he got upset about losing, he was immediately restrained, and put in the seclusion room. His mother verified his experience, stating that he spent most of his time at that clinic in the seclusion room. My heart broke for this child - he was clearly experiencing a trigger for his trauma in the form of a simple board game. In addition, he was not being monitored safely during that seclusion which is worrisome given he has a diagnosed seizure disorder. This is unacceptable and something that he will have to work through for years to come.

Analysis

The client was harmed in this case. However, not all of the details are known. Was the previous facility reported to HCPF or the Colorado Department of Public Health and Environment who regulate autism services and facilities respectively? Was the person providing the ABA Board Certified? If so, was he or she reported to the BACB? Finally, was it a technician administering the ABA? This last question is particularly salient because the majority of the stories that came in during this time related to the application of ABA by technicians. This sunrise review concerns the licensing of behavior analysts not technicians. The role and culpability of a behavior analyst in this situation is unknown. If there was one involved and if there was a license mandate, then it is possible that

⁵² BACB. A Summary of Ethics Violations and Code-Enforcement Activities: 2016-2017. Retrieved June 25, 2020, from https://www.bacb.com/wp-content/uploads/2020/05/180606_Ethics_Violations_and_Code-Enforcement-Whitepaper.pdf

person may have been disciplined. While harm did occur, it is unknown if discipline was dispensed and there is not enough factual evidence to necessitate a state-mandated licensing program.

The pervasiveness of individuals who are not certified by the BACB but are nonetheless claiming to deliver behavior-analytic treatment is unknown. The Applicant indicates that there are cases in other states where non-certified individuals engage in fraud, malpractice, and criminal behavior. COPRRR could not substantiate the Applicant's claims. The Applicant asserts that since the BACB has no authority over the uncertified individuals and the BACB is powerless to discipline them, there are no consumer checks.

COPRRR staff analyzed the instances submitted by the Applicant. COPRRR also contacted other sources to determine if behavior analysts are harming consumers and if licensing is warranted. Given the nature and scarcity of the cases, the analysis did not uncover appropriate evidence to warrant regulation.

Need for Regulation

The second sunrise criterion asks:

Whether the public needs and can reasonably be expected to benefit from an assurance of initial and continuing professional or occupational competence.

This sunrise criterion asks if the state should require BA education or education and examination before practicing in Colorado.

The few cases submitted by the Applicant related to incidents that occurred in states other than Colorado. None of the cases were recent and occurred over a span of many years. The Colorado-specific cases analyzed lacked the details necessary to determine culpability of harm. This sunrise review has determined that there is not enough objective evidence to conclude specifically that the unregulated practice of ABA is currently harming Colorado citizens. Requiring initial and continuing competency for BAs could enact unnecessary barriers for professionals to practice the profession. Therefore, licensing and mandatory continuing education are not necessary to protect Colorado consumers.

Alternatives to Regulation

The third sunrise criterion asks:

Whether the public can be adequately protected by other means in a more cost-effective manner.

The “Profile of the Profession” section of this sunrise review explained in detail the credentials the BACB issues. It issues Board Certified Behavior Analyst-doctoral credential to BAs that meet the necessary qualifications and have a PhD. It issues a Board Certified Behavior Analyst credential to BAs that meet the necessary qualifications and have a Master’s degree. It issues a Board Certified Assistant Behavior Analyst to those who meet the qualifications and have a Bachelor’s degree (these individuals must be supervised by a Board Certified Behavior Analyst). It also issues a Registered Behavior Technician credential to those who have met specified qualifications (these individuals too must be supervised).

The qualifications necessary for each of these credentials are exacting and compare positively to most any state-implemented licensing regime. In fact, the information regarding licensing in other states on pages 16 and 17 of this sunrise report, show 60 percent of the states that instituted licensure require a BACB credential. In other words, the BACB actually sets the conditions for state licensure in those states. Moreover, professionals consider BACB certification to be the gold standard among ABA practitioners.

The BACB may also discipline a member that does not follow the *Professional and Ethical Compliance Code for Behavior Analysts* (Code). All formal disciplinary actions are made public, including revocation. The major contention with the disciplinary actions are that an action does not prevent an individual from continuing to practice and the BACB does not have the ability to sanction individuals who are not BACB-certified. The Code covers several aspects of BA practice, including:

- Responsible Conduct of Behavior Analysts,
- Relationships Behavior Analysts’ Responsibility to Clients,
- Assessing Behavior,
- Behavior Analysts and the Behavior-Change Program,
- Behavior Analysts as Supervisors,
- Behavior Analysts’ Ethical Responsibility to the Profession of Behavior Analysts,
- Behavior Analysts’ Ethical Responsibility to Colleagues,
- Public Statement,
- Behavior Analysts and Research, and
- Behavior Analysts’ Ethical Responsibility to the BACB.

In addition to possessing the ability to discipline BACB-credentialed professionals, as was pointed out above, the BACB has actually disciplined individuals, including some revocations.

Moreover, while there is no title protection, or any regulation, in Colorado law for BAs, the BACB has trademarked four titles. Therefore, it offers a measure of title protection. No practitioner may use one of these titles without first acquiring a credential from the BACB:

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- Registered Behavior Technician or RBT,
 - Board Certified Assistant Behavior Analyst or BCaBA,
 - Board Certified Behavior Analyst or BCBA, or
 - Board Certified Behavior Analyst - Doctoral or BCBA-D.

If a person uses the title “Board Certified Behavior Analyst or BCBA”, as did occur in Case I above, that person could be subject to a trademark infringement and be civilly liable. This has a similar effect and consequence as title protection of a state-issued credential. If a person unduly uses a state-protected licensure title, that person could be subject to state-rendered discipline.

In sum, holding a BACB credential is very similar to a state-issued license. Because of the similarity, holding a BACB credential is a valid alternative to government regulation.

Collateral Consequences

The fourth sunrise criterion asks:

Whether the imposition of any disqualifications on applicants for licensure, certification, relicensure, or recertification based on criminal history serves public safety or commercial or consumer protection interests.

The Applicant did not recommend any disqualifications specific to BAs different from other professions. It is a violation of the statues regulating mental health professionals to be convicted of, plead guilty or nolo contendere to, or receive a deferred sentence to a felony.⁵³

The Applicant submitted cases where criminal conduct occurred. Licensing would not have prevented or did not prevent, depending on the case, the harm from occurring. Still, a provision such as this could prevent those individuals who were convicted from obtaining a license in Colorado.

Conclusion

The General Assembly has determined that the unregulated practice of psychotherapy harms Colorado consumers and has mandated regulation for all individuals who practice it. A sunrise review conducted in 2018 determined that what a BA does is essentially psychotherapy. ABA is defined by the Association of Professional Behavior Analysts as:⁵⁴

⁵³ 12-245-224(1)(a), C.R.S.

⁵⁴ Association of Professional Behavior Analysts. *Model Behavior Analyst Licensure Act § 3.F.* Retrieved March 5, 2020, from https://cdn.ymaws.com/www.apbahome.net/resource/resmgr/pdf/APBA_ModelLicensureAct_Aug20.pdf

The design, implementation, and evaluation of instructional and environmental modifications to produce socially significant improvements in human behavior. The practice of applied behavior analysis includes the empirical identification of functional relations between behavior and environmental factors, known as functional assessment and analysis. Applied behavior analysis interventions are based on scientific research and direct and indirect observation and measurement of behavior and environment. They utilize contextual factors, motivating operations, antecedent stimuli, positive reinforcement, and other procedures to help individuals develop new behaviors, increase or decrease existing behaviors, and emit behaviors under specific environmental conditions. The practice of applied behavior analysis excludes diagnosis of disorders, psychological testing, psychotherapy, cognitive therapy, psychoanalysis, and counseling.

The Colorado statutory definition of psychotherapy, below, is highlighted by the similarities between it and ABA:

[T]he **treatment, diagnosis, testing, assessment, or counseling in a professional relationship to assist individuals or groups to alleviate behavioral and mental health disorders, understand unconscious or conscious motivation, resolve emotional, relationship, or attitudinal conflicts, or modify behaviors that interfere with effective emotional, social, or intellectual functioning. Psychotherapy follows a planned procedure of intervention that takes place on a regular basis,** over a period of time, or in the cases of testing, assessment, and brief psychotherapy, psychotherapy can be a single intervention.

Regardless of the last sentence of the ABA definition, comparing the definitions compels this sunrise review to reach a comparable conclusion to the 2018 sunrise review. ABA is a more specific, profession-related definition that falls under the umbrella of the “legal” definition of psychotherapy. Even when the definition is interpreted very narrowly. The main purpose of ABA is to employ,

...motivating operations, antecedent stimuli, positive reinforcement, and other procedures to help individuals develop new behaviors, increase or decrease existing behaviors, and emit behaviors...

In other words, ABA at its core, attempts to, “modify behaviors that interfere with emotional, social, or intellectual functioning.”

After the 2018 sunrise review, the Colorado Division of Professions and Occupations (Division) published a statement on the State Board of Unlicensed Psychotherapists website. It read that ABA practitioners, such as those certified by the BACB, are not required to register as Unlicensed Psychotherapists unless they engaged in the practice of psychotherapy. BAs who do practice under the legal definition of psychotherapy must

be regulated and those who do not are not required to be regulated. Notwithstanding, based on its interpretation of House Bill 20-1206, the Division will no longer register Unlicensed Psychotherapists who were not registered prior to July 14, 2020.

Still, the evaluation of harm to the consumer by those who practice ABA is the primary focus of this sunrise review. The Applicant asserts that harm due to incompetence is the primary reason for licensing. While this is a main premise of the Applicant, there is no evidence to conclude that Colorado consumers are being harmed due to the unregulated practice of behavior analysts. In the health-care universe, there is always a measure of interpretation in designing treatment for each patient/client. In this circumstance, harm has not been illustrated by instances or anecdotes. COPRRR found little evidence to justify regulation due to incompetence. The Applicant submitted few cases of harm, none of which are recent or Colorado-specific and COPRRR's independent research did not find harm to consumers.

The standard established by the General Assembly for sunrise reviews to determine if regulation of a profession or occupation is necessary, is harm that is, "easily recognizable and not remote or dependent on tenuous argument."⁵⁵ The threshold required by the General Assembly has not been met. Regulation of BAs is unjustified.

Recommendation - Do not regulate Behavior Analysts.

⁵⁵ § 24-34-104.1(4)(b)(I), C.R.S.