

Registered Behavior Technicians' Training Experiences for Severe Problem Behavior: A Survey

By

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Registered Behavior Technicians’ Training Experiences for Severe Problem Behavior: A Survey

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## ABSTRACT

Applied behavior analysis (ABA) is the one of the most effective treatments for the symptoms of autism spectrum disorder (ASD). Registered Behavior Technicians (RBTs) are the primary paraprofessionals who deliver ABA services to individuals with ASD. To become certified, RBTs complete a 40-hour online training, pass a competency assessment, and standardized examination to obtain the certification. In addition to demonstrating competency, ongoing supervision (5% of hours worked) and training from a certified behavior analyst is required for RBTs to maintain the credential and practice effectively with clients. This makes effective training and supervision critical, especially for technicians working with children who exhibit severe behaviors. Colombo, Taylor, and Hammond (2020) surveyed board certified behavior analysts (BCBAs) who practice with clients who engage in severe problem behavior in the home setting and identified several areas for improvement. However, they did not assess the needs and ongoing training offered to RBTs who frequently provide ABA services to individuals with severe problem behavior. Thus, the purpose of the current study is to extend Colombo, Taylor, and Hammond (2020) by surveying RBTs for their training experiences for working with children with severe problem behavior. Results indicated that many RBTs do not receive initial formal training or ongoing training for severe problem behavior cases. Increasing the amount of effective training for RBTs will increase the effectiveness of implementation of interventions and decrease the number of work-related injuries for RBTs and clients.

*Keywords:* Applied behavior analysis, autism spectrum disorder, severe problem behavior, RBT, survey, training

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## Registered Behavior Technicians' Training Experiences for Severe Problem Behavior: A Survey

Applied behavior analysis (ABA) is an evidence-based approach of systematically applying behavioral principles to discover environmental variables that influence socially significant behaviors to create behavior-change through respondent and operant conditioning (Baer et al., 1968). ABA is a science composed of principles such as reinforcement, punishment, chaining, and shaping (Dillenburger & Keenan, 2009). ABA is an effective treatment used with individuals with a variety of behaviors and diagnoses, including autism spectrum disorder (ASD). It has also been used in other areas such as education, business, gerontology, sports, and physical health.

### **ABA for ASD**

ASD is a neurodevelopmental spectrum disorder characterized by impairments in social communication, social interaction, and repetitive and restrictive behaviors (Loukusa, 2021). ASD is a lifelong disorder affecting 1 in 44 children (Center for Disease Control and Prevention [CDC], 2022) that is often treated through ABA. Children with ASD developmentally and academically fall behind their same-aged peers due to their learning deficits through imitation and listening compared to normally developing peers. ABA uses a highly structured format and routine composed of techniques used in everyday natural settings, structured, one-on-one, and group settings to teach skills and adaptive behaviors and reduce maladaptive behaviors (Medavarapu et al., 2019). The Lovaas Method is a method in ABA therapy developed to support children with ASD in the 1960s. It is an early intervention method developed by O. Ivar Lovaas to decrease severe problem behaviors and establish communicative language (Smith & Eikeseth, 2011). The Lovaas Method uses one-on-one instruction through a break-down of tasks into small steps and the use of reinforcement for correct responses for 30-40 hours per week

(Smith & Eikeseth, 2011). Lovaas's studies (1973) were some of the first to establish the effectiveness of ABA. In his initial study 40 children on the autism spectrum were followed for 15 years. Each student was in a long-term, intensive behavior plan tailored to their individual needs. All children had shown improvements in intellectual, educational, emotional, and social skills. By the end of the study, nine of the children showed no diagnosable autism and eight children maintained their gains throughout elementary school (Larsson & Wright, 2011). Since Lovaas's initial research, additional research continues to provide strong support for the effectiveness of ABA interventions with children with ASD. Meta-analyses along with review papers have been used to examine ABA procedures and their effectiveness in decreasing rates of severe problem behavior in individuals with ASD (Newcomb & Hagopian, 2018).

### ***Severe Problem Behavior***

In addition to deficits in social communication and restricted behaviors, individuals with developmental delays such as ASD often exhibit maladaptive behaviors. Maladaptive behaviors are present in higher rates of children with ASD and intellectual and developmental disabilities (IDD) compared to typically developing peers. These maladaptive behaviors, often known as problem behaviors, are defined as behavior that poses a risk to self or others and disrupts functioning (Newcomb & Hagopian, 2018). According to Newcomb and Hagopian (2018) problem behaviors among individuals with ASD and IDD include self-injurious behavior (e.g., head hitting, head banging, skin picking, and self-biting), aggression (e.g., hitting, scratching, biting, and kicking), pica (ingesting non-food items), disruptive behavior (e.g., destruction and throwing items), and elopement (leaving a specified area without permission). A problem behavior is classified as 'severe' when it occurs regularly, causes harm to self or others, impedes developmentally appropriate participation in activities, and requires a higher level of care

(Newcomb & Hagopian, 2018). The presence of problem behavior negatively impacts quality of life for the child, limits family's access to community resources, and becomes costly to manage the problem behavior. Restrictive behavior management is sometimes used for severe problem behavior and can include physical restraint, mechanical restraint, and seclusionary practices. Physical restraint refers to the holding of an individual to stop a behavior from occurring (Reed & Luiselli, 2013). Mechanical restraint is the restriction of movement using mechanical means. Lastly, seclusionary practices involve placing the individual in a separate room. Aggressive behaviors can financially impact the family and limit access to support for treatment of aggression.

### **ABA for Severe Problem Behavior**

From the standpoint of ABA, problem behaviors are a result of contingencies of reinforcement in the environment that shape and maintain the behaviors. Behavior analysis does not look to the child's personality, traits, or other psychological constructs when explaining the reason for problematic behavior. A behavioral analysis of problematic behavior posits that the problems or deficiencies are in the environment, not the client. For instance, parents or other caregivers may seek to calm the child who is exhibiting problematic behavior by providing preferred items which can have an immediate effect to temporarily cease the problem behavior (Newcomb & Hagopian, 2018). However, reinforcement of these problem behaviors increases their future probability of the behavior occurring in similar circumstances. This is sometimes referred to as a *reinforcement trap* (Rosales-Ruiz & Baer, 1997). In other situations, a child's behavior when presented non-preferred tasks can result in a delay or termination of the task demand. As with the previous example, the removal of the task may stop the child's behavior but serves to increase the probability of it occurring in the future under similar circumstances.

### **ABA Assessments for Problem Behavior**

ABA interventions for individuals with developmental disabilities can be categorized into two levels of intervention: focused and comprehensive (intensive) ABA therapy. Focused ABA usually targets one or a small number of deficits. For instance, a focused intervention might aim to reduce problem behavior while establishing and strengthening adaptive skills. Focused programs are usually between 10-20 hours per week (Smith & Iadaorla, 2015). Conversely, comprehensive interventions consist of intensive one-on-one treatment and address skill deficits in a variety of areas including problem behaviors. Comprehensive intervention often requires 30-40 hours per week to successfully address all areas in which skill deficits are present. Both types of interventions are often one-on-one, highly individualized, and include ongoing evaluations of the individual's progress to treatment. Research demonstrates this intervention to be highly effective for severe problem behavior; therefore, empirically supporting its procedures to be evidence-based (Smith & Iadaorla, 2015).

### ***Functional Behavior Assessment***

A highly relied upon assessment for problem behavior is a functional behavior assessment. A functional behavior assessment (FBA) is an assessment that involves techniques used to identify the "function" (purpose) of a behavior (i.e., the variables that occur and maintain problem behavior) through experimental and nonexperimental methods (Newcomb & Hagopian, 2018). The identification of the function of the behavior allows for the appropriate intervention to decrease problem behaviors, teach alternative appropriate behaviors, and increase appropriate behaviors. There are four main functions of behavior: escape, attention, tangible, and automatic reinforcement (Dixon et. al, 2012). Escape-maintained behavior is when the individual behaves in a way to avoid something; for example, a child may throw learning materials on the ground



and is no longer required to complete the activity. The child learns that throwing the materials will relieve them from completing the activities. Attention-maintained behavior is when the individual behaves in a way to receive focused attention from those around them, for example, a child screams until a parent attends to them. The child learns that screaming receives attention from their parent. Tangible-maintained behavior is when an individual behaves in a way to get a preferred item or access to a preferred activity, for example, a child cries when told “no” by parent to buy candy, the parent buys the candy and the crying ends. The child learns that crying will get him or her the candy. Automatic reinforcement, self-stimulatory behavior, is when an individual behaves in a way that feels good to the individual, for example, a child scratches his or her skin because of eczema to relieve itching (Dixon et. al, 2012).

**Nonexperimental Methods.** Nonexperimental methods to identify the function of problem behavior include standardized assessments, such as interviews, questionnaires, checklists, and rating scales, and descriptive assessments, such as a direct observation. These methods are less intrusive and less intensive. Indirect methods and standardized assessments gather information from individuals who directly observed the problem behavior (Newcomb & Hagopian, 2018). The Functional Analysis Screening Tool (FAST) and Questions About Behavioral Function (QABF) are formal behavioral questionnaires used to help identify the function of a behavior (Matson & Williams, 2014). These indirect assessments ask questions to identify variables maintaining problem behavior, such as, “Does he/she seem to be saying “come see me” or “look at me” when engaging in the behavior?”. Indirect assessments help develop a hypothesis about the function a behavior possibly serves (Matson & Williams, 2014).

Descriptive methods, such as Antecedent-Behavior-Consequence (ABC) data recording, involves the assessor observing the behavior in the natural environment. The antecedent (A),

events, action, or circumstances that occur before the behavior, behavior (B), the behavior, and consequences (C) the action or response following the behavior, are all recorded and analyzed to identify the function of the behavior (Newcomb & Hagopian, 2018). The clinician then reviews the ABC log to assess for common antecedents (triggers) and consequences (reinforcers) that occur before and after the problem behavior, respectively.

**Functional Analysis.** If the function of a behavior is not identified from these less intrusive FBA methods, a more intensive experimental method called a functional analysis may be used (Kurtz et al., 2020). A functional analysis (FA) uses direct observation and measurement of problem behavior during systematic manipulation of environmental variables (Reed & Luiselli, 2013). The FA procedures have specific conditions, usually based on the four basic functions of behavior, to determine which conditions produce the highest frequency of the behavior to identify its function (Dixon et. al, 2012). For instance, in the escape condition an instructor may provide low preferred tasks for a five-minute period and collect data on the frequency of problem behavior in this condition. In the attention condition, the instructor typically informs the child that they are busy and only provides attention when the problem behavior occurs. This condition tests to see if the behavior is maintained by positive reinforcement in the form of attention. In each condition, the target behavior is reinforced for a brief period to determine if the target behavior stops. This helps to determine the function of the behavior (Dixon et. al, 2012). The conditions are compared to determine the frequency of the target behavior within each condition to hypothesize the function of the behavior to create interventions to decrease problematic behaviors and teach appropriate behaviors that serve the same function (Dixon et. al, 2012).

Since environmental manipulations occur, FA methodology can concretely demonstrate environment-behavior relationship, supporting the concept that behavior is a function of the environment (Colombo et al., 2020). FA procedures are implemented in standard and modified forms dependent upon the severity and topography of the severe problem behavior. The FA approach has a strong empirical background within hundreds of studies replicating their use across a range of response populations in settings (Newcomb & Hagopian, 2018). FAs are beneficial in that they can definitively identify functional reinforcers that can be directly related to treatment development of function-based treatments. This allows practitioners to alter the variable in the environment responsible for the problem behavior to decrease the problem behavior and prevent future occurrences. Once a function is identified, problem behavior can be decreased in the environment through antecedent manipulations, terminating the reinforcement for the problem behavior (extinction), and/or replacing the problem behavior with an alternative appropriate behavior (Reed & Luiselli, 2013). Research shows this methodology to be highly effective in the assessment, treatment, and prevention of severe problem behavior. However, research has also shown that practitioners receive limited opportunities to learn and implement FA methodology (Colombo et al., 2020). It should be noted that FA methodology is not only a standard experimental procedure used in ABA as a therapy, but also the foundation for behavior analysis as a whole (Colombo et al., 2020).

### **ABA Treatments for Problem Behaviors**

As mentioned, a variety of behavioral interventions exist for managing problem behavior. After a function is identified using an FBA or functional analysis, treatments are designed to reduce problematic behavior while teaching more adaptive ones. There are different types of interventions with ABA. Antecedent strategies before the behavior in question occurs. The goal

of antecedent strategies is to reduce motivation for the problem behavior to occur or prevent it all together. Consequence interventions address the environmental conditions after a behavior occurs. For instance, removing reinforcement for a problematic behavior and/or designing dense reinforcement for a new more appropriate behavior.

### *Antecedent Strategies*

Antecedent strategies for problem behavior are procedures that individuals use to keep others from engaging in negative behaviors and facilitate positive behavior strategies for these individuals. Prevention strategies include choice-making, language interventions, activity schedules, instructional fading, and behavior intervention plans. Choice making procedures provide individuals the opportunity to have control over reinforcement and teach the individual to make a choice as an alternative to engaging in problem behavior. Functional communication training, Picture Exchange Communication System (PECS), and augmentative and alternative devices are all antecedent procedures used to teach individuals communication skills to compete with challenging behaviors and build their verbal repertoire (Reed & Luiselli, 2013). Functional communication training teaches these individuals a functional, equivalent communicative behavior to the individuals problem behavior. This training teaches alternative requests that are designed to match the function of the original problem behavior. These new responses can be any topography such as vocal language, sign language, picture exchange communication, or augmentative device. Specifically, PECS is an approach that teaches language skills through the exchange of pictures and teaching initial requesting, picture discrimination, grammar, and responding to requests. PECS can be helpful for individuals that are non-verbal or do not use an augmentative for alternative devices. Teaching these communication skills through PECS can help individuals compete with challenging behavior and it's often used as a directory meant for

challenging behavior (Reed & Luiselli, 2013). Augmentative and alternative communication systems such as a speech generation device can also be used to teach communication skills. The common theme between all these functional communication interventions is that an appropriate manner of communication is taught and reinforced, while the problematic behavior is not reinforced. Other antecedent interventions used in ABA include activity schedules, instructional fading, and modification of response effort. An activity schedule is a sequential display of photographs, videos, computer images, drawings, symbols for individuals to follow within routines or as a transitional tool. Activities and reinforcement times (such as breaks) can be paired with the steps on the activity schedule to serve as a prompt for following classroom routines. Instructional Fading is a procedure consisting of drastically decreasing the rate in the level of difficulty of instructions that are identified as antecedents to escape-maintained problem behaviors. Instructions are systematically increased in rate and level of difficulty to the desired level (Reed & Luiselli, 2013).

### ***Consequence Strategies***

Consequence strategies for problem behaviors are strategies used to modify the environment and responding to the problem behaviors immediately after they occur to increase or decrease the behavior and to teach an alternative appropriate response. There are two main types of consequences: reinforcement and punishment (Cooper, 2019). Reinforcement is a basic behavior principle in which a response is followed immediately by a stimulus change resulting in an increase of that response in the future. Punishment is a basic behavior principle in which a response is followed immediately by a stimulus change resulting in a decrease of that response in the future. Consequence-based interventions use these variables within four basic categories: positive reinforcement, negative reinforcement, positive punishment, and negative punishment

(Cooper, 2019). Positive reinforcement is the addition of a desired stimulus following a behavior that results in that behavior occurring more often in the future. A token economy is a positive reinforcement contingency strategy used by rewarding the target behavior with a token (reinforcer) which is exchanged for a backup reinforcer (Carnett, 2014). For example, a child's name is called and taught to make eye contact, once the child makes eye contact the child receives a token, the tokens can then be exchanged for reinforcers, such as candy. Negative reinforcement is the removal of an undesired stimulus following a behavior that results in that behavior occurring more often in the future. For example, a toddler does not sleep through the night, wakes up multiple times and cries every night until his mother comes in to rock him to sleep. The crying stops when the mother comes in and rocks the toddler to sleep.

Positive punishment is the addition of an undesired stimulus following a behavior that results in that behavior occurring less often in the future. Restitutional overcorrection is a positive punishment procedure where the individual must fix the environment to a better condition than when the undesired behavior was emitted. For example, a child throws a toy on the floor, the child must now clean up all toys in the playroom (Cooper, 2019). Negative punishment is the removal of desired stimulus following a behavior that results in that behavior occurring less often in the future. A time-out strategy is a negative punishment strategy in ABA that removes reinforcement for a period of time. For example, a child takes a toy from a peer during free time, the child is immediately removed from free time for 5 minutes. The likelihood of the child taking a toy from a peer during free time in the future decreases. Another common consequence strategy is differential reinforcement. Differential reinforcement is a strategy that reinforces appropriate behaviors and puts the problem behavior on extinction. Extinction is withholding reinforcement. Differential reinforcement of other behavior (DRO) reinforces the

absence of the inappropriate behavior for a set amount of time. For example, a child spits about every 2 minutes, to eliminate the child's spitting, the child is reinforced every 1 ½ minutes that spitting does not occur. If the child spits within the 1 ½ minutes the interval restarts (Cooper, 2019). Consequence strategies are an effective way to create positive behavior change.

Reinforcement is used alone whenever possible and punishment is used when reinforcement strategies are exhausted to prevent unwanted side effects, such as avoidance behavior, counter-aggression, and accidental reinforcement of inappropriate behaviors.

### **ABA Service Delivery Model**

Most ABA treatment programs use a tiered supervised service-delivery model to deliver intervention to individuals with ASD and IDD (Silbaugh & Fattal, 2021). A behavior analyst, Board Certified Behavior Analyst (BCBA) or Board Certified Behavior Analyst-Doctoral (BCBA-D) designs and supervises a treatment program delivered by a Registered Behavior Technician (RBT) or Behavior Technician (BT). A Board Certified assistant Behavior Analyst (BCaBA) may also be involved in the service delivery of intervention by providing clinical and case management support under the supervision of the BCBA or BCBA-D. ABA services are frequently delivered by supervisees such as RBTS and BTs (Silbaugh & Fattal, 2021) and not the BCBA themselves.

### ***BCBA-D and BCBA Role***

BCBA-D is a doctoral-level individual certified in ABA and a BCBA is a graduate-level individual certified in ABA. A BCBA-D and BCBA are independent practitioners who provide support to individuals and their families through coordination and direction of ABA services, completing functional assessments and analyses, writing behavior acquisition and reduction procedures, and developing skill acquisition programs. As mentioned, these interventions are

typically implemented by RBTs or BTs who work under the direction of the BCBA or BCBA-D. To be able to supervise, BCBAs and BCBA-Ds are required to complete a specific 8-hour supervisor training curriculum outline (Behavior Analyst Certification Board [BACB], n.d.). BCBAs and BCBA-Ds commonly have a caseload of clients and spend their time holding supervision sessions in which they direct staff on implementation of the treatment plan, monitor data, and make clinical decisions. BCBAs and BCBA-Ds may also take data on the accuracy with which the supervisees implement specific treatments to ensure quality of service delivery.

### ***RBT Role***

As mentioned, RBTs are the primary paraprofessionals who deliver ABA services to individuals with ASD. To become an RBT, an individual must complete a 40-hour online training, pass a competency assessment, and standardized examination. In addition to demonstrating initial competency, ongoing supervision (5% of hours worked) and training from a BCBA is required for RBTs to maintain the credential and practice effectively with clients (BACB, n.d.). RBTs also commonly provide services to individuals with severe problem behavior. The RBT is not an independent practitioner and cannot make changes to client treatment plans without coordination with their supervisor. Thus, proper training is crucial to effective implementation of therapy by RBTs.

### **Crisis Training for Severe Problem Behavior**

Considering the vast number of ABA interventions and service delivery system, proper training is crucial to effective implementation of ABA. The quality of ABA services delivered by staff to children with ASD and IDD is influenced by the consistency of quality training provided by supervisors to implement services. With effective training, the changes are greater that staff will work more effectively to increase skill acquisition, decrease challenging behaviors, and



improve overall quality of life for individuals with ASD and other developmental delays. Ineffective staff training can lead to poor performance within implementation of these critical treatments for severe problem behavior risking compromised quality of life for these individuals. Various evidence-based training has been found effective in treatment with severe problem behaviors, including prevention interventions, crisis management training, and safety care (Reed & Luiselli, 2013).

### **Behavioral Crisis Management and Training**

A crisis is defined as a “time of intense difficulty, trouble, or danger (Reed & Luiselli, 2013). According to Reed & Luiselli, a behavioral crisis is defined as relative instances where a client's behavior escalates beyond baseline levels stretching the abilities and resources of the staff to serve the client. A behavioral crisis is said to have emerged when staff can no longer rely on their daily interventions. A behavioral crisis varies between individuals' service delivery settings and clinical teams (Reed & Luiselli, 2013). Behavioral crises may occur through behavior changes caregivers can no longer tolerate or little to no changes in the individual's overall behavior.

### ***Therapeutic Restraint and Protective Holding***

Severe problem behaviors such as self-injury and aggression increase the risk of the individual and caregiver to severe harm and even death. Therapeutic restraint and protective holding are a protection strategy that is sometimes necessary in emergency situations to protect the individual and others from harm. This strategy is used as a last resort in reducing the engagement of severe problem behavior. Therapeutic restraint, often referred to as “physical restraint” or “immobilization”, is the strategic application of safety procedures of the holding of an individual's arms and legs contingent upon aggression, destruction, or self-injury, until the

individual is safe and no longer engaged in the problem behavior (Reed & Luiselli, 2013). Therapeutic restraint is implemented through different types of procedures, such as brief response prevention, extended response prevention, and assisted movement. A brief response prevention, referred to as response blocking, is the temporary disruption of the problem behavior by an intervener through physical contact lasting seconds. Extended response prevention is a physical hold (therapeutic restraint) which can include a single-person, two-person, or three- and four- person hold. The type of hold must match the severity of the behavior. Assisted movement is a procedure where the individual is required to be lifted or transported to another area during problem behavior. This procedure can involve minimal restriction with guidance or multiple interveners. All therapeutic restraint procedures involve effective training and coordination (Reed & Luiselli, 2013). Several commercially available restraint trainings/certifications are available including Crisis Prevention Institute (CPI) and Safety Care.

**Crisis Prevention Institute®.** The Crisis Prevention Institute's (CPI) main program uses proven strategies to safely defuse, anxious, hostile, or violent behavior at its earliest stages. CPI offers training programs in verbal intervention, nonviolent crisis intervention, nonviolent crisis intervention with advanced physical skills and classroom culture. Nonviolent crisis intervention with advanced physical skills teaches staff decision-making skills to assess and address high-risk situations using a combination of verbal intervention strategies and restrictive interventions with physical skills (Crisis Prevention Institute [CPI], 2022). Crisis prevention and management strategies are effective ways to prevent, manage, and temporarily stop severe challenging behaviors through redirection, limit setting, and restraints when necessary.

**Safety Care®.** Safety care is an ABA based training program that provides skills and competencies to effectively prevent, minimize, and manage behavioral challenges with safety,

dignity, and possible change. It is adaptable to individuals' functional levels and helps to teach replaceable, appropriate, and functionally equivalent behaviors to individuals of all ages through reinforcement behavior change strategies. Safety care is used in various settings including programs, clinics, hospitals, schools, in-home and foster care providers (Safety Care®, n.d.). An advanced skills module is offered for more severe problem behaviors to include physical safety skills, team intervention, peer aggression prevention and management strategies, vehicle incidents, object management, transitions, and floor holds. Common severe problem behaviors addressed within safety care training includes physical aggression, self-injury, verbal aggression, uncooperativeness, hyperactivity, suicidality, elopement, tantrums, sexual aggression, intimidation, use of weapons, bullying, property destruction, and fighting. Safety care training is an effective evidence-based program to train and teach alternatives to severe problem behaviors to create change in the environment (Safety-Care®, n.d.).

### **Current State of Training for Severe Problem Behavior**

BCBA's have an ethical obligation to continue ongoing skill development and training after certification. They also have an obligation to practice within their scope of competence. As mentioned, effective supervision training is crucial to staff performance and service quality. Several researchers have investigated the types of training offered to BCBA's working in ABA. Reed and Henley (2015) conducted a study to determine the types of staff and supervisory training and performance management that is offered to BCBA aspirants and BCBA's post certification in applied settings. The authors conducted a survey of 382 individuals and polled respondents on their demographics, preservice training, in-service training, incentives, and training on staff supervision. Results indicated only approximately half of the respondents received initial orientation or pre-service training upon hire before working independently, one

third of the respondents lacked ongoing training, and three quarters of the respondents indicated they supervised staff without receiving effective supervision training. The findings suggested supervision loads were manageable but most of the respondents indicated they were not effectively trained on supervision practices (Reed & Henley, 2015). Respondents reported that training consisted primarily of verbal and written instruction and interactive discussion, which research has shown does not produce desired performance changes all the time. Over one-third of the respondents reported they were not prepared to successfully complete their job responsibilities. Only 40% of respondents reported their supervisor or a trainer observed them working and approximately three quarters of the respondents supervised staff without receiving effective supervision training (Reed & Henley, 2015).

As mentioned, BCBA's supervise and train staff to directly implement behavioral interventions. Therefore, it is vital for BCBA's to receive sufficient pre-service, in-service, and supervision training. A BCBA's training directly impacts the effectiveness of the individual's behavioral treatment intervention delivered under their supervision. This is especially true when clients exhibit problematic behaviors. Colombo, Taylor, and Hammond (2020) conducted a survey to partially replicate and extend Reed and Henley (2015) findings to BCBA's and BCBA-Ds who practice primarily in the home setting with clients who engage in severe problem behavior to assess the current state of training with these respondents. Respondents were asked to report their personal demographics, company demographics, experience with severe problem behavior, and initial and ongoing training with severe problem behavior cases. A quarter of the respondents indicated they worked with three to five severe problem behavior cases. Almost all respondents indicated working with an individual who engaged in the topography "hitting of others and very few experienced the topography "fire setting". Approximately 68% of

respondents reported receiving in-field supervision for the assessment and treatment of severe problem behavior (Colombo et al., 2020). Direct supervision of FAs was reported to be provided on more than one occasion to only 35% of respondents. Almost half of the respondents indicated they never received initial or ongoing support for their first severe problem behavior case and a frequency of ongoing, month-to-month support, 1-2 hours for 30% of respondents and 3-5 hours for 27.5% of respondents (Colombo et al., 2020). Overall, results were consistent with that of Reed and Henley (2015) and their findings on BCBA training in general. It appears that this lack of adherence to evidence-based standards in training also extends to treatment of cases with severe problem behavior in the home setting (Colombo et al., 2020). Their data indicates that BCBA are often assigned cases with severe problem behavior without initial and ongoing training. This increases likelihood that they are able to effectively train the direct care staff (primarily RBTs) who provide direct implementation of these interventions to clients with severe problem behavior.

### **Statement of the Problem**

The type of ongoing training and support provided to RBTs working with individuals with severe challenging behaviors is vital to effective ABA treatment. Previous research by Reed and Henley (2015) and Colombo and colleagues (2020) examined training for BCBA and identified several areas for improvement. Colombo (2020) specifically found that training for BCBA managing cases with problematic behavior was also lacking. However, they did not examine the training needs of RBTs working with individuals who exhibit severe challenging behaviors. Since RBTs are the primary paraprofessional providing ABA services, competent training for them is essential for appropriate treatment for individuals displaying problem behaviors. Identifying the types of training and support, or lack thereof, provided to RBTs

working with individuals with severe challenging behaviors could help inform practices in the field and help supervisors better understand the needs of RBTs they oversee working in this population. Thus, the purpose of the current study is to extend the research of Colombo, Taylor, and Hammond (2020) and Reed and Henley (2015) by surveying RBTs working with children with severe problem behavior on their training experience.

## **Method**

### **Participants**

Participants were 146 RBTs who responded to an anonymous survey distributed through ABA related groups on Facebook and Reddit. Participants had to indicate they were currently an RBT and report they had experience working with severe challenging behavior to be included in the current survey. For the purpose of this survey, severe challenging behavior was defined: as any behavior that reasonably may result in harm, damage, or threat to the safety of oneself, another person, or property – wherein the result of the behavior may be or has been incarceration or hospitalization.

### **Instrumentation**

A 28-item survey was created to assess for the training experiences of RBTs working with individuals with severe problematic behavior. Many of the questions were adapted from those asked by Colombo and colleagues (2020). The survey was divided into four sections that included demographic information, initial training for severe problem behavior cases, ongoing training/support for severe problem behavior cases, and case outcomes/cost benefits. In the demographic section, participants were presented with questions regarding RBT certification, gender, age, level of education, place of residence, setting of experience, experience with ASD, experience with severe problem behavior, and severe problem behavior topography. The second

section assessed initial training and asked questions regarding training received prior to being assigned to a case with an individual who exhibited severe problem behavior. The questions pertained to staff comfortability, types of formal training received, and intervention plans for severe problem behavior. The third section presented questions about ongoing training received after staff began working with an individual who exhibited severe problem behavior. The presented questions regarded the amount of supervision per case, performance feedback, formal training while working on cases with a client who exhibited severe problem behavior, and staff burnout. The final section asked about cost/benefits of services and inquired about possible outcomes of working with individuals who exhibited severe problem behavior, including staff and client work-related injuries and hospitalizations. See Appendix I for the survey items used in the current study.

### **Procedure and Data Analysis**

The survey distributed on two social media platforms (Facebook and Reddit) through a posted link to direct the participant to an anonymous survey hosted through Youngstown State University's Qualtrics website ([www.qualtrics.com](http://www.qualtrics.com)). The post contained an invitation to complete the survey and a hyperlink which directed respondents to the survey when clicked. Once directed to the survey site respondents were presented an online consent form. If the respondents did not consent to participate, the survey ended. If they consented to start the survey but indicated they did not have current certification as an RBT or did not have experience with individuals with the defined severe problem behavior, the survey ended. The survey was designed to block participants from completing the survey multiple times. On some items, participants were permitted to select multiple answers on some questions. On other questions, respondents could type in an answer, and on some questions they were directed to follow up

questions to gain more information. Data analysis was completed per question by examining the percentage of respondents who endorsed a specific item.

## **Results**

### **Demographic Information**

Table 1 displays the responses for demographic information on the current survey. Of the 142 that initially consented to participate, 114 (80%) indicated they currently held the RBT credential. A total of 91 (84%) identified as female, 16 (15%) identified as male, and 1 (1%) identified as non-binary. A total of 39 (36%) respondents indicated they were between 18-25 years of age, 44 (40%) indicated they were between 26-33 years of age, 18 (17%) reported they were 34-41 years of age, 6 (6%) reported they were 42-49 years of age, and 1 (1%) indicated they were 50-57 years of age. A total of 19 (18%) respondents indicated they held a high school diploma or GED, 66 (61%) held a bachelor's degree, 22 (20%) held a master's degree, and 1 (1%) held a Doctoral degree. A total of 68 (63%) respondents indicated holding an RBT certification for 2 years or less, 25 (23%) 3-4 years, 11 (10%) 5-6 years, and 4 (4%) 7-8 years. A total of 106 (98%) reported residing in the United States and 2 (2%) resided outside of the United States. A total of 47 (43%) of the respondents RBT work was indicated to occur in a clinic setting, 21 (19%) in a home setting, 17 (16%) in a school setting, 5 (5%) in a community setting, and 18 (17%) in mixed settings. A total of 14 (13%) respondents indicated working with individuals with autism for less than 1 year, 44 (41%) of respondents for 1-3 years, 34 (31%) of respondents for 4-6 years, 8 (7%) of respondents for 7-9 years, 3 (3%) of respondents for 10-12 years, 2 (2%) of respondents for 13-15 years, and 3 (3%) of respondents for 15 or more years. A total of 9 (8%) respondents indicated working with clients 3 years or below, 85 (79%) respondents indicated working with clients 4- 11 years of age, 12 (11%) respondents indicated



working with clients 12-18 years of age, 2 (2%) respondents indicated working with clients 19-29 years of age, and 0 (0%) respondents indicated working with clients 30 or more years of age.

### **Characteristics of RBT Cases**

Table 2 displays the responses for characteristics of problem behavior for the current survey. Of the 114 who consented to participate, 90 (83%) indicated they had experience working with clients who exhibited severe problem behavior and 18 (17%) indicated they had no experience working with clients who exhibited severe problem behavior. Of the respondents included in the continuation of the survey, 29 (33%) indicated working with 1-2 clients that exhibited severe problem behavior, 36 (41%) indicated working with 3-5 clients that exhibited severe problem behavior, 12 (14%) indicated working with 6-9 clients that exhibited severe problem behavior, 5 (6%) indicated working with 10-15 clients that exhibited severe problem behavior, 1 (1%) indicated working with 16-19 clients that exhibited severe problem behavior, and 4 (5%) indicated working with 20 or more clients that exhibited severe problem behavior. A total of 26 (19%) of respondents indicated working with clients who exhibited an intensity of problem behavior of minimal harm, 64 (47%) of respondents indicated working with clients who exhibited an intensity of problem behavior of moderate harm, and 45 (33%) of respondents indicated working with clients who exhibited an intensity of problem behavior of severe harm. Respondents were instructed to select all exhibited topographies of problem behavior for client cases with severe problem behavior, the primary topographies are reported. A total of 79 (6%) of respondents indicated a client exhibited a topography of hitting, 68 (5%) of respondents indicated a client exhibited a topography of biting, and 65 (5%) of respondents indicated a client exhibited a topography of object throwing. See Table 2 for additional topographies reported.

**Initial Training**

Table 3 displays responses for initial training for severe problem behavior cases for the current study. These responses indicated training experiences received prior to being assigned to a case with a client who exhibited severe problem behavior. A total of 12 (15%) respondents indicated always being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior, 12 (15%) respondents indicated very frequently being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior, 14 (17%) respondents indicated occasionally being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior, 17 (21%) respondents indicated rarely being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior, 8 (10%) respondents indicated very rarely being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior, and 18 (22%) respondents indicated never being asked if they were comfortable working a case with severe problem behavior before being assigned to work with clients who exhibited severe problem behavior. A total of 33 (21%) respondents reported receiving formal training in the form of overlaps with other technicians working with the same client or clients who exhibited severe problem behavior before being assigned to a case with a client who exhibited severe problem behavior, 26 (16%) respondents reported receiving formal training in the form of overlaps with other technicians working with the same client or clients who exhibited severe problem behavior before being assigned to a case with a client who exhibited severe problem behavior, 29 (18%)

respondents reported receiving formal training in the form of individual meetings with a supervisor before being assigned to a case with a client who exhibited severe problem behavior, 28 (17%) respondents reported receiving formal training in the form of group meetings with a supervisor before being assigned to a case with a client who exhibited severe problem behavior, 14 (9%) respondents reported receiving formal training in the form of a discussion of research related on the problematic behavior before being assigned to a case with a client who exhibited severe problem behavior, 4 (3%) of respondents reported receiving formal training in the form of provision of research without discussion before being assigned to a case with a client who exhibited severe problem behavior, 3 (2%) of respondents reported receiving formal training in other forms before being assigned to a case with a client who exhibited severe problem behavior, and 21 (12%) of respondents reported receiving no formal training before being assigned to a case with a client who exhibited severe problem behavior.

A total of 70 (86%) of respondents reported that their supervisor created a behavior intervention plan (BIP) to address severe problem behavior exhibited by the client, 9 (11%) of respondents reported their supervisor did not create a BIP, and 2 (2%) reported they were not sure. For those who reported that their supervisor created a BIP, a total of 17 (25%) of respondents indicated a supervisor who wrote the behavior plan always provided training implementing the BIP before implementing it with a client, 15 (22%) of respondents indicated a supervisor who wrote the behavior plan frequently provided training implementing the BIP before implementing it with a client, 24 (36%) respondents indicated a supervisor who wrote the behavior plan occasionally provided training implementing the BIP before implementing it with a client, 5 (7%) respondents indicated a supervisor who wrote the behavior plan rarely provided training implementing the BIP before implementing it with a client, 2 (3%) respondents indicated

a supervisor who wrote the behavior plan very rarely provided training implementing the BIP before implementing it with a client, and 4 (6%) respondents indicated a supervisor who wrote the behavior plan never provided training implementing the BIP before implementing it with a client. A total of 12 (18%) respondents reported a supervisor very frequently completed reliability or treatment fidelity data on the BIP implementation, 21 (31%) respondents reported a supervisor frequently completed reliability or treatment fidelity data on the BIP implementation, 9 (13%) respondents reported a supervisor occasionally completed reliability or treatment fidelity data on the BIP implementation, 4 (6%) respondents reported a supervisor rarely completed reliability or treatment fidelity data on the BIP implementation, 6 (9%) respondents reported a supervisor very rarely completed reliability or treatment fidelity data on the BIP implementation, 9 (13%) respondents reported a supervisor never completed reliability or treatment fidelity data on the BIP implementation, and 6 (9%) of respondents reported not sure if a supervisor completed reliability or treatment fidelity data on the BIP implementation. A total of 31 (40%) of respondents reported they received crisis management training before starting to work with clients who exhibited severe problem behavior, 29 (37%) of respondents reported this training was received after starting to work with clients who exhibited severe problem behavior, and 18 (23%) of respondents reported they were not provided crisis management training when working with clients who exhibited severe problem behavior.

### **Ongoing Training/Support**

Table 4 displays responses for ongoing training and support for severe problem behavior cases for the current study after work began on a case with a client who exhibited severe problem behavior. A total of 2 (3%) respondents indicated receiving no supervision on any cases with a client who exhibited severe problem behavior, 18 (24%) of respondents indicated receiving 1-2

hours of supervision per case per month with a client who exhibited severe problem behavior, 43 (57%) respondents indicated receiving 3-5 hours of supervision per case per month with a client who exhibited severe problem behavior, 7 (9%) respondents indicated receiving 6-9 hours of supervision per case per month with a client who exhibited severe problem behavior, and 6 (8%) respondents indicated receiving 10 or more hours of supervision per case per month with a client who exhibited severe problem behavior. When asked about the type of performance feedback they received, 32 (42%) of respondents reported receiving only verbal feedback, 1 (1%) respondent reported receiving only written feedback, 6 (8%) respondents reported receiving only graphic feedback, and 37 (49%) respondents reported receiving a combination of different feedback methods. Other than case supervision, 23 (24%) respondents indicated receiving formal training in the form of in-office 1 on 1 meetings with a supervisor for severe problem behavior while working on cases with a client who exhibited severe problem behavior, 30 (32%) respondents indicated receiving formal training in the form of in-office 1 on 1 group meetings with a supervisor, 11 (12%) respondents indicated receiving formal training in the form of in-office 1 on 1 meetings with a supervisor for severe problem behavior while working on cases with a client who exhibited severe problem behavior, 28 (30%) of respondents indicated receiving no ongoing formal training for severe problem behavior while working on cases with a client who exhibited severe problem behavior, and 2 (2%) of respondents indicated receiving other formal training with a supervisor for severe problem behavior while working on cases with a client who exhibited severe problem behavior. A total of 25 (33%) of respondents indicated that their supervisor discussed burnout or the effects of job-related stress while working with a client who exhibited severe problem behavior and 51 (67%) of respondents indicated this conversation did not occur with their supervisor. For those who responded that their supervisor

discussed burnout or the effects of job-related stress with them, 17 (68%) indicated that accommodations or changes were made to make it easier to provide services to the client and 8 (32%) responded that no such accommodations or changes were made.

### **Case Outcomes/Cost Benefit**

Table 5 displays responses for case outcomes and cost benefits for cases with severe problem behavior for the current study. A total of 57 (75%) of respondents indicated they suffered a work-related injury when working with a client who exhibited severe problem behavior and 19 (25%) of respondents they did not. For those who indicated they had suffered an injury, a total of 7 (12%) respondents indicated that they were hospitalized due to the work-related injury and 50 (88%) indicated they were not. For those who were hospitalized, 5 (9%) indicated that they missed 1 week or more of work. A total of 28 (37%) of respondents indicated that their client suffered an injury due to severe problem behavior while the respondent was working with them, with 48 (63%) of respondents indicated that their client(s) did not suffer any injury.

### **Discussion**

The purpose of this study was to extend Colombo, Taylor, and Hammond (2020) and Reed and Henley (2015) by surveying RBTs for their training experiences for working with children with severe problem behavior. There is a need to determine what kinds of supervision RBTs are offered and their perceptions of the effectiveness of such supervision. The results of the current study indicated that respondents reported a lack of initial and ongoing training on intervention implementation plans and professional crisis management training. Several areas of concern were noted. A sizeable proportion of respondents (26%) reported less than 5 hours of supervision per month on such cases. Over 40% reported only receiving verbal feedback from

their supervisor when working such cases. Over 29% of respondents reported no ongoing training when working case(s) with severe problem behavior. Less than one-third of respondents reported discussions between them and their supervisors about case comfortability, burnout, and the effects of job-related stress.

The initial training and amount of ongoing training and support for cases with clients who exhibit severe problem behavior is a concern for the field of ABA in relation to effective service delivery. In the current study, 22% of respondents indicated they were not even asked if they were comfortable working a case with severe problem behavior. As mentioned, RBTs are the primary paraprofessionals delivering services to clients who exhibit severe problem behavior, and their training is vital to effective implementation of services. However, assessing comfortability at the onset of a case is very important. Data obtained in the current survey indicated that 13% of respondents reported they received no training when being assigned to a case with severe problem behavior. Although 86% reported a behavior intervention plan was created by their supervisor, 24% of RBTs reported they only received occasional supervision, 7% reported they rarely received supervision, 3% reported they very rarely received supervision, and 6% reported *never* receiving supervision on implementation of this plan. A total of 13% reported never having procedural fidelity taken on their implementation and 9% were not sure if it was taken. A total of 24% of RBTs reported only 1-2 hours of case supervision per month for cases with severe problem behavior. Most notably, 30% of respondents reported no ongoing training after being assigned a case with severe problem behavior. While the sample size in the current study is low, the results do not support the use of appropriate training strategies for RBTs working intense cases.

The case outcomes and cost benefit questions indicated that 75% of respondents reported suffering a work-related injury while working with severe problem behavior and 12% were hospitalized due to the work-related injury. This high percentage of work-related injuries is a concern that may result from lack of initial and ongoing training provided to the RBTs working cases with severe problem behaviors. Frequent injuries and absences likely contribute to burnout and disrupt services. Alarmingly, 37% of respondents reported a client suffered an injury while working a severe problem behavior case. This percentage is extremely concerning for the field of ABA and the kinds of treatments clients are receiving, even if most respondents indicated there were no injuries on their cases. Preventing harm for both the client and RBT should be at the forefront of importance in any therapy environment.

### **Implications for Applied Settings**

Results indicated that many RBTs do not receive initial formal training or ongoing training for severe problem behavior cases. This may be a result of environment settings, lack of supervision training for BCBA's, and financial restraints from employment. However, it is an ethical obligation for BCBA's to uphold best practices for supervision and implementation of evidence-based strategies to deliver services to clients. To uphold these standards and give RBTs the training they need to provide best services to clients, supervisors need to be aware of the ethics surrounding supervision. For instance, if a BCBA has too many cases on their caseload, it is still up to them to effectively manage the case. This might involve speaking with organizational leadership about reducing cases or asking for additional support. Supervisors should also take steps to figure out the best matches between staff and clients. It would be advisable for BCBA's to assess RBT comfortability and strengths when assigning them to a client who exhibits



significant behaviors. This could help prevent many of the issues identified in the current survey before they start. Behavior analysts should also survey RBT for their feedback preferences.

One major finding of this survey was that few RBTs reported ongoing training after being placed with a client who exhibited significant problem behavior. This is concerning for several reasons. To solve the problem, supervisors should come up with ways to provide such training. This could involve speaking with organizational leadership and asking for support on cases that require extra supervision. Video modeling and synchronous telehealth supervision could supplement training if the supervisor runs into time constraints or lack of time in general. Supervisors can create an integrity checklist as a self-monitoring form to help RBTs remain cognizant of the steps of the intervention. Supervision logs and secure communication applications could be used to record RBT concerns and provide written feedback when supervisors are not directly available. Increasing the amount of effective training for RBTs will increase the effectiveness of implementation of interventions and decrease the number of work-related injuries for RBTs and clients.

### **Limitation and Future Directions for Research**

A limitation in this study is the sample size of 142 participants. This is a small sample size in relation to the number of current RBTs. However, the number obtained in the current survey are similar to sample sizes in other published literature on professionals working with children with ASD and their burnout and satisfaction (Boujut et al., 2017; Kazemi et al., 2015; Luiselli et al., 2016). This survey was conducted via social media platforms in ABA related groups on Facebook and Reddit which limited the number of participants reached. Future research should include an increased sample size and replication of survey questions for reliability and validity and extend on RBT perceptions of burnout, job-related stress, and needs

for effective service delivery when working cases with clients who exhibit severe problem behaviors. Future research should also examine the effects of changes in supervisor practices and the concomitant effects on RBT training and satisfaction in agencies. This information could help identify what changes need made by supervisors to provide their supervisees the support that they need.

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**Table 1**

*Demographic Information*

	<i>N</i>	Percentage
<b>RBT Credential Status</b>		
Yes, hold the RBT credential	114	80.28
No, do not hold the RBT credential	28	19.72
<b>Gender</b>		
Male	16	14.81
Female	19	84.26
Transgender	0	0.00
Non-binary	1	0.93
Other	0	0.00
<b>Age</b>		
18-25	39	36.11
26-33	44	40.74
34-41	18	16.67
42-49	6	5.56
50-57	1	0.93
<b>Level of Education</b>		
High school or GED	19	17.59
Bachelors	66	61.11
Masters	22	20.37
Doctoral	1	0.93
<b>Years Certified as an RBT</b>		
2 years or less	68	62.96
3-4 years	25	23.15
5-6 years	22	10.19
7-8 years	1	3.70
<b>Place of Residence</b>		
United States	106	98.15
Other	2	1.85
<b>Primary Service Setting</b>		
Home	21	19.44
Clinic	47	43.52
School	17	15.74
Community	5	4.63
Mixed	18	16.67

**Table 1 (cont.)*****Demographic Information***

	<i>N</i>	Percentage
<b>Years of Experience Working with ASD</b>		
Less than 1	14	12.96
1-3 years	44	40.74
4-6 years	34	31.48
7-9 years	8	7.41
10-12 years	3	2.78
13-15 years	2	1.85
15+ years	3	2.78
<b>Age Range of Clients</b>		
3 years or below	9	8.33
4-11 years	85	78.70
12-18 years	12	11.11
19-29 years	2	1.85



**Table 2**

*Characteristics of Problematic Behavior*

	<i>N</i>	Percentage
Experience Working with Severe Problem Behavior		
Yes	90	83.33
No	18	16.67
Number of Clients with Severe Problem Behavior		
1-2	29	33.33
3-5	36	41.38
6-9	12	13.79
10-15	5	5.75
16-19	1	1.15
20 or more	4	4.60
Intensity of Severe Problem Behavior		
Minimal harm	26	19.26
Moderate harm	64	47.41
Severe harm	45	33.33
Topography of Severe Problem Behavior		
Hitting	79	6.25
Biting	68	5.38
Elopement	64	5.07
Object Throwing	65	5.15
Pulling others' hair	47	3.72
Kicking	59	4.67
Scratching	63	4.99
Self-hitting	64	5.07
Pinching	49	3.88
Grabbing	51	4.04
Excessive screaming/yelling	62	4.91
Head butting	42	3.33
Self-biting	44	3.48
Breaking objects	46	3.64
Pushing	43	3.40
Spitting at others	42	3.33
Skin picking	29	2.30
Slapping	38	3.01
Ingesting objects/pica	24	1.90
Disrobing	34	2.69
Severe threats	21	1.66
Fecal smearing	21	1.66
Self-hair pulling	16	1.27
Licking and/or mouthing objects	41	3.25
Masturbating in public	13	1.03

**Table 2 (continued)***Characteristics of Problematic Behavior*

Topography of Severe Problem Behavior	<i>N</i>	Percentage
Body slamming	14	1.11
Grabbing others' genitals	7	0.55
Excessive eating	14	1.11
Bowel or urine retention	15	1.19
Rumination	15	1.19
Rectal digging	12	0.95
Operant vomiting	8	0.63
Eye gouging/poking	9	0.71
Choking	10	0.79
Genital rubbing against others	8	0.63
Violent ideation	8	0.63
Harm to nonhuman animals	5	0.40
Fecal throwing	5	0.40
Coprophagia	4	0.32
Self-restraint	1	0.08
Self-cutting	3	0.24
Fire setting	0	0.00

**Table 3**

***Initial Training Reported by RBTs***

	<i>N</i>	Percentage
Discussed Case Comfortability		
Always	12	14.81
Very Frequently	12	14.81
Occasionally	14	17.28
Rarely	17	20.99
Very Rarely	8	9.88
Never	18	22.22
Type of Formal Training Before Case Assignment		
Overlaps with other technicians working with the same client or clients who exhibited severe problem behavior	33	20.89
<i>i. If yes, how many (1-2, 3-4, 5-6, 7+)</i>		
1-2	15	45.45
3-4	11	33.33
5-6	3	9.09
7+	4	12.12
Overlaps with other technicians working with clients who did not exhibit severe problem behavior	26	16.46
<i>ii. If yes, how many (1-2, 3-4, 5-6, 7+)</i>		
1-2	6	23.07
3-4	2	7.69
5-6	9	34.61
7+		
Individual (1 on 1) meetings with supervisor(s)	19	18.35
Group meetings with supervisor(s)	0	17.72
Discussion of research related on the problematic behavior	1	8.86
Provision of research without discussion	4	2.53
Other: _____	3	1.90
I received no formal training prior to starting my cases.	21	13.29
Behavior Intervention Plan (BIP) for Severe Problem Behavior		
Yes	70	86.42
No	9	11.11
Not sure	2	2.47

**Table 3 (continued)**

*Initial Training Reported by RBTs*

Formal Training on BIP Before Implementation		
My supervisors who wrote behavior plans <b><u>always</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client.	17	25.37
My supervisors who wrote behavior plans <b><u>frequently</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client.	15	22.39
My supervisors who wrote behavior plans <b><u>occasionally</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client	24	35.82
My supervisors who wrote behavior plans <b><u>rarely</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client.	5	7.46
My supervisors who wrote behavior plans <b><u>very rarely</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client.	2	2.99
My supervisors who wrote behavior plans <b><u>never</u></b> provided me training on implementing the behavior intervention plan before implementing it with a client.	4	5.97
Treatment Fidelity of BIP Frequency		
Very Frequently	12	17.91
Frequently	21	31.34
Occasionally	9	13.43
Rarely	4	5.97
Very Rarely	6	8.96
Never	9	13.43
Not sure	6	8.96
Professional Crisis Management Training for Severe Problem Behavior		
Yes, before I started working with clients who exhibited severe problem behavior	31	39.74
Yes, after I started working with clients who exhibited severe problem behavior	29	37.18
No, never.	18	23.08

**Table 4**

***Ongoing Training***

	<i>N</i>	Percentage
Hours per Month On-the-job Supervision per Case		
No supervision on any of my cases	2	2.63
1-2 hours of supervision per case each month	18	23.68
3-5 hours of supervision per case each month	43	56.58
6-9 hours of supervision per case each month	7	9.21
10+ hours of supervision per case each month	6	7.89
Type of Performance Feedback		
Only verbal feedback from a supervisor	32	42.11
Only written feedback from a supervisor	1	1.32
Only graphic feedback (graphs of your performance) from a supervisor	6	7.89
Some combination of different feedback methods (i.e., verbal, and written feedback)	37	48.68
Formal Training While Working Severe Problem Behavior Case		
In-office 1 on 1 meetings with supervisor	23	24.47
In-office group meetings with supervisor	30	31.91
Discussion of research related on the problematic behavior	11	11.70
Provision of research without discussion	0	0.00
I received no ongoing training when working with any clients who exhibited problem behavior	28	29.79
Other:	2	2.13
Discussion of Burnout or Effects of On-the-job Stress		
Yes	25	32.89
No	51	67.11
Accommodations or Changes for Burnout or Effects of On-the-job Stress		
Yes	17	68.00
No	8	32.00

**Table 5**

*Case Outcomes/Cost Benefits*

	<i>N</i>	Percentage
Work-related Injury While Working with Severe Problem Behavior		
Yes	57	75.00
No	19	25.00
Hospitalization Due to Injury		
Yes	7	12.28
No	50	87.72
Absent 1+ week of Work Due to Injury		
Yes	5	8.77
No	52	91.23
Client Injury While Working Case		
Yes	28	36.84
No	48	63.16

## APPENDIX I

Jan 31, 2022 10:41:30 AM EST

Kris Brown  
Psych Sciences and Counseling 140719, Health Professions 141216

Re: Expedited Review - Initial - 2022-74 ABA Thesis

Dear Dr. Kris Brown:

Youngstown State University Human Subjects Review Board has rendered the decision below for ABA Thesis.

Decision: Exempt

Selected Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your project is approved for one year. You must submit a Renewal Submission and have your project approved by [date], if your project continues beyond one year.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

Findings: The researcher is conducting a study to investigate RBTs training experiences for working with children with severe problem behavior. The survey does not ask for identifying information and will be submitted electronically. Participants will provide passive consent and can quit the survey or not answer questions they do not want to answer. Approved.

Best wishes in the conduct of your study.

Sincerely,  
Youngstown State University Human Subjects Review Board  
do-not-reply@cayuse.com  
Mon 1/31/2022 10:41 AM