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# Caregiver Training

# Introduction

A necessary, though often overlooked component of Applied Behavior Analysis (ABA) therapy, is parent or caregiver training. Caregiver training has been a component of ABA for decades in different formats. The recent Covid-19 pandemic has demonstrated the significant need for practical, high-quality caregiver training. When schools, clinics, and in-home therapy providers began temporarily shutting down to slow the spread of the virus, parents and caregivers were suddenly required to take on therapeutic continuation. This highlighted a few vital points for therapy providers. First, caregivers who were receiving caregiver training were better prepared for this transition. Second, the telehealth model for caregiver training, while not new, gained more widespread interest. It became clear to clinicians within the field that teletherapy was a viable option during the pandemic and beyond.

# Section 1: Background and Significance

ABA clinicians and researchers have long since identified the benefits of incorporating parents and caregivers into treatment, though practices among providers still vary widely. While children diagnosed with autism spectrum disorder (ASD) often spend 20-40 hours per week receiving direct therapy, that still leaves a significant portion of time that they spend outside of therapy with their caregivers and other family members. Regardless of how much progress is made within therapy, that progress may be lost if caregivers are unable to follow through at home on the skills and behaviors that are taught in sessions. This highlights the necessity for caregiver training to bridge the gap between skills and behaviors learned in therapy and the application of those skills in the home environment. Caregiver training is a subset of ABA therapy wherein a parent or caregiver is trained on skills and strategies to best support their child's progress. Caregivers are trained on behavioral principles, strategies to teach new skills, individualized behavior intervention strategies, and other applicable skills based on the needs of the client and their family.

A key component and one of the seven dimensions of ABA is generality.. Generality refers to the degree to which a skill or behavior carries over into other settings and situations, outside of the training environment (Baer et al., 1987). When clients are taught how to request items or information (i.e., mand), they will need to exhibit those skills in the environment where it matters the most. If they don't generalize those skills in their natural environment, then the time, energy, and resources spent teaching these

skills are likely to be questioned. This is where caregiver training comes in. Board Certified Behavior Analysts (BCBA®s) have a responsibility to provide high-quality, effective caregiver training to enhance the overall therapeutic process.

*Benefits to caregiver training are immense, including, but not limited to:*

- Promoting generalization of new skills. During caregiver training, children have an opportunity to generalize the skills that they have learned during direct sessions with behavior technicians to their parents or caregivers. This is a vital piece in ensuring long-lasting positive behavior change. If children are only able to demonstrate skills in a treatment setting, then they are less likely to contact naturally maintaining reinforcers. Contact with naturally occurring reinforcers is one strategy for promoting generalization. Caregiver training also provides the opportunity to assess for generalization and make necessary modifications to treatment if generalization is not occurring (Dogan et al., 2017).

- Ensuring maintenance of skills. When behavior analysts create and implement a behavior intervention plan or a skill acquisition plan, the intention is for the intervention to eventually be discontinued. Parent training provides an opportunity to ensure that skills are maintained across time after the intervention has been removed. As with generalization, contact with naturally occurring reinforcers is also one contributor to the maintenance of skills across time. Training caregivers to implement behavioral strategies in their child's natural environment may significantly improve the child's likelihood of maintaining skills over time (Dogan et al., 2017).

- Teaching caregivers how to handle challenging behaviors. When a client engages in behaviors that may harm themselves or others and/or may interfere with their quality of life, a behavior intervention plan (BIP) may be recommended. The BIP should be individualized to each client's unique needs and strengths. It is essential that caregivers are trained on these procedures, so they are well-equipped to respond to and prevent challenging behavior through an individualized plan that works for them and their family. Caregiver training offers optimal opportunities for training caregivers on these procedures, as well as troubleshooting and taking feedback from the caregiver on what is working and what is not working.

- Consistency across settings. With therapists and caregivers on the same page, the child may make increased progress toward mastery of goals. Children often

attend multiple settings-therapy, school, home, etc. The likelihood of making progress decreases when caregivers in different settings are not on the same page. For example, a functional behavior assessment (FBA) identifies a child's behaviors as maintained by attention. In therapy, the team implements a differential reinforcement of alternative behavior (DRA) intervention to eliminate the inappropriate behavior while teaching a replacement behavior to gain attention. At home, however, the child receives attention when that behavior occurs. This may result in a behavior contrast, where the behavior decreases within therapy, but increases at home. Through caregiver training, caregivers can be trained to follow the same intervention procedures and teaching strategies that are used during therapy sessions, resulting in more positive outcomes. Furthermore, caregiver training allows behavior analysts the opportunity to identify when caregivers are experiencing barriers to following through, so modifications can be made as needed to enhance the carry-over of procedures.

- Development and strengthening of the parent-child relationship. Encouraging and allowing caregivers to play an active role in their child's treatment may strengthen the rapport between the child and caregivers. Rapport can be conceptualized as processes that result in a person becoming a discriminative stimulus (SD) for the availability of reinforcement. This is a much-needed step in the therapeutic process. When caregivers, teachers, and therapists establish a strong rapport with the child, the child is more likely to comply with expectations, thus reducing challenging behaviors and encouraging faster progress toward skill mastery (Factor et al., 2019).

- Rapport development through caregiver training may result in an increase in caregiver "buy-in." "Buy-in" refers to the degree to which caregivers trust and agree to the BCBAⓇs treatment recommendations. Oftentimes, families are not fully prepared for what to expect when they start ABA therapy. They may be hesitant after reading information online about ABA and therefore approach treatment with hesitancy. If caregivers are not on board with treatment recommendations, treatment progress will likely be slow or perhaps nonexistent. Through well-developed caregiver training, a BCBAⓇ can establish rapport with caregivers, which in turn increases the likelihood of buy-in.

- Preparing caregivers for the eventual discharge of ABA. A common saying in the field of ABA is that a behavior analyst's primary goal is to "work ourselves out of a job." ABA is not always viewed as being a life-long treatment. At some point, the

focus of treatment may be to discharge a client from services and have them move on to a different level of care. Through caregiver training, behavior analysts can empower caregivers to make this transition when the time comes, feeling confident in their ability to implement behavioral strategies in order to teach new skills and modify behavior.

- Access to care. Many families experience barriers to accessing ABA therapy (Lindgren et al., 2016). This might include lengthy waitlists, a lack of providers in their area, and/or insurance processing. Caregiver training is sometimes provided to support caregivers during this waiting period, providing them with vital knowledge of behavioral principles and behavior management techniques. This allows them the opportunity to learn necessary skills that can be used to reduce challenging behaviors and teach their child new skills.
- Potential overall reduced costs and duration of treatment. Research has demonstrated that caregiver involvement in autism-related therapies is often more cost-effective than treatment consisting of interventions provided by therapists alone (Lerman et al., 2020). Treatments to address the symptomatology of ASD, including ABA, are often very expensive and typically are provided over several years. Providing superior caregiver treatment guidance from the onset of therapy may reduce the overall costs and duration of treatment for that individual (Lerman et al., 2020).

## Section 1 Personal Reflection

What other benefits are there to caregiver training in ABA?

## Section 1 Key Words

Behavior contrast - Occurs when a rate of behavior increases in one setting but decreases in another.

Caregiver training - A subset of ABA therapy wherein a parent or caregiver is trained on skills and strategies to best support their child's progress.

Differential reinforcement of alternative behaviors (DRA) - A procedure involving reinforcing one response class while placing an alternative response class on extinction.

Discriminative Stimulus - A stimulus that signifies the availability of reinforcement.

Functional behavior assessment (FBA) - An assessment used to identify the function and maintaining variables of a behavior of concern.

Generality - Behavior change that extends to other settings, people, and stimuli outside of the teaching setting.

## Section 2: Caregiver Assessment & Goal Development

Rapport development is the foundation of a strong therapeutic relationship (Lugo et al., 2017). As behavior analysts are establishing rapport with a client's caregiver during the initial session(s), they may also conduct assessments and identify goals. As is the same with the behavior analyst's work with children, caregiver goals should be based on multiple components. Caregiver goals may include those identified via an assessment of skills, caregiver preference or request, and/or based on the individual needs of the child that has been assessed.

First, a behavior analyst should consider which goals are the most important to the child's current developmental progress. For example, if the child is new to treatment and does not exhibit a manding repertoire, a focus of treatment may be to establish a mode of communication and conduct mand training. Following through on this skill, by caregivers, will be crucial in the development of the child's mand repertoire. Therefore, training the caregiver on what manding is, how to teach and contrive mands, and anything specific to the mode of manding that the child is learning (i.e., using proloquo2go, Picture Exchange Communication Systems (PECS), or American Sign Language (ASL)) are all goals that would be beneficial to work on as initial caregiver training goals.

Goal selection should be a collaborative process between the behavior analyst and caregivers. The caregivers should play an active role in the development of goals to ensure a high level of social validity.

According to Albone-Bushnell (2014), behavior analysts should train caregivers on the following goals throughout caregiver training:

- Behavior management strategies for challenging behaviors
- Caregiver implementation of the behavior intervention plan
- Identifying and using a variety of reinforcers

- Using clear and appropriate language when speaking with a child
- Utilizing antecedent strategies
- Understanding the role of the caregiver in the child's functioning and generalization of skills in the home and school settings
- Identifying functional communication skills for their child
- Participating in development of treatment goals
- Practicing natural environment training
- Identifying self-help skills and daily living skills applicable to their child
- Utilizing play time for teaching skills
- Utilizing and understanding joint attention
- Identifying pro-social behaviors in their child
- Breaking tasks into smaller parts to teach their child new skills
- Identifying the function of their child's behaviors
- Utilizing antecedent-behavior-consequence (ABC) data

*The team should select goals that:*

1. **Address high-priority areas for the child, caregivers, and/or any other stakeholders.**

   The first priority is identifying areas of concern and goals that are of priority to the family. Through an open-ended interview, behavior analysts can identify which areas are of the highest priority for the family. These high priority areas might include communication development, daily living skills training, behavior management, or another area of focus. Behavior analysts can ask the caregiver questions that provide information related to what they want from treatment, what they want from caregiver training, what their values are, what barriers they might have identified, etc. Consider goals that will empower the caregiver to help their child's development in the areas that are of the highest importance.

2. **Are likely to result in a positive impact on the family's overall functioning.**

Consider whether the goal will result in a change for the better for the family and balance that with any level of stress that may arise from training on that goal. A risk-benefits assessment is recommended for any potential goals that may result in a high level of stress.

3. **Are feasible for the family to implement consistently.**

   The best-written interventions are useless if they are not realistic for the family. It is vital to fully assess the family dynamics and consider the feasibility of each goal. If the goal is not likely to be followed through on, then alternatives should be considered. For example, an intervention that requires a high degree of individualized attention and focus may not be feasible for caregivers in a large family with minimal support. Time and resource availability should be assessed and considered during the initial caregiver assessment.

4. **Focus on socially significant behaviors.**

   Implement caregiver goals that have a likelihood of resulting in positive outcomes for the child. Socially significant behaviors may include those related to improved communication and daily routines, reduced targeted behaviors, or another area that will benefit the child. Additionally, focus on goals that empower the caregiver to take charge of their child's treatment progression. Identify and select behaviors that are behavioral cusps and pivotal behaviors, allowing the child and caregiver to experience new contingencies and contact new forms of reinforcement.

   *Example of a behavioral cusp:* An intervention plan is implemented, with the caregiver trained on the procedures. The goal is to systematically increase tolerance to sitting at a table. When the child achieves this goal, it opens up many possibilities for contacting new environments and sources of reinforcement, for both the child and caregiver. Example of a pivotal behavior: A parent is trained on naturalistic teaching procedures, related to learning methods for contriving mand opportunities. The parent is then able to use that knowledge of naturalistic teaching to teach their child to identify colors while playing with his favorite toys.

*While not an exhaustive list, caregiver training may include any of the following concepts or skills.*

## Reinforcement

Reinforcement is a vital component of behavior analysis, at the core of what ABA professionals do. Therefore, reinforcement should be one of the earlier lessons conducted in caregiver training. Focus first on teaching the parent the concept of reinforcement and how reinforcement is used to modify behavior. Explain how reinforcement occurs both intentionally and unintentionally. For example, caregivers may unintentionally reinforce their child's challenging behaviors in an effort to quickly calm them down and therefore discontinue the aversive situation. This knowledge highlights the need for caregivers to learn to attend to their own behavior when addressing their child's behavior.

Teach the caregiver to differentiate between positive and negative reinforcement. Positive reinforcement is the addition of a stimulus immediately following a behavior, resulting in an increase in that behavior. Negative reinforcement occurs when a (typically aversive) stimulus is removed following a particular behavior, resulting in an increase in that behavior. Specific examples and scenarios can be provided for both positive and negative reinforcement. This may empower the caregiver to take charge of reinforcing behaviors they hope to see continue/increase.

While positive reinforcement is important to focus on, negative reinforcement should not be overlooked. Negative reinforcement of a caregiver's behavior can be tremendously powerful. Oftentimes, when caregivers are struggling to follow through with behavioral procedures, it is due to the caregiver's behaviors being negatively reinforced. For example, when a child is screaming while his mom is on an important phone call, it is so much easier at the moment to quickly give in and do whatever might calm the child. Perhaps, the mother quickly gives their child a piece of candy to quiet them. The response effort required to follow through on an intervention plan of requiring a mand and waiting for the child to be calm before providing the candy is much higher, compared to the effort required to quickly give the child the candy. The ability to quickly cease the aversive situation (the child screaming) negatively reinforces the caregiver's behavior. This highlights the importance of focusing on negative reinforcement in caregiver training.

Additionally, caregivers should be assisted in understanding what stimuli serve as reinforcers and identifying the difference between reinforcers and preferences. This may allow for an opportunity to also train the caregiver on preference assessments, if these may be of benefit to identifying *potential* reinforcers.

A common misunderstanding of reinforcement is that it is similar to or the same as bribery. This is sometimes a concern of parents who say that they do not want to bribe their children to get them to do things. The difference between a bribe and reinforcement should be adequately explained during caregiver training. The primary difference between reinforcement and bribery is that reinforcement occurs contingent on a particular behavior. In other words, the item (reinforcer) is only provided *if* and *when* the targeted behavior occurs. If the behavior does not occur, then the reinforcer is not provided. Alternatively, in bribery, the item is provided before the behavior is demonstrated. Therefore, receiving the item is not contingent on demonstrating a particular behavior. Let's consider an example of each to further clarify.

**Example of reinforcement:** A child does her homework, then her mom says "hey awesome job doing your homework right away. Here, you can have a sucker." She then gives her daughter a sucker, after the homework is completed. This constitutes reinforcement because the sucker and praise are provided contingent on the completion of her homework.

**Example of bribery:** Mom says "if you do your homework, I'll give you a sucker." She then gives her daughter a sucker. The child pulls her homework out and gets started. The mother gave her child the sucker before she actually did her homework. This constitutes a bribe, not reinforcement. Receiving a sucker was not contingent on completing her homework, as evident by the sucker being provided before she even started her homework.

Caregivers do not necessarily need training on specific reinforcement procedures such as differential reinforcement of other (DRO) behaviors, differential reinforcement of alternative (DRA) behaviors, etc. Caregivers should be trained on reinforcement procedures that are specific to their child's intervention plan. For a child who has a DRA procedure in place, the caregiver should be trained on this specific procedure. However, with a child whose BIP does not consist of a DRA, this caregiver may not need training in that area, particularly early on in therapy.

## Punishment versus reinforcement

Caregivers can be trained on what punishment means from a behavioral perspective. The traditional methods of punishment may or may not actually serve as a punishment as intended. Punishment only occurs when the presentation or removal of a stimulus results in a reduction of the behavior. The behavior analyst can only say for sure based

on analysis of the data. Caregivers can be trained to differentiate that reinforcement indicates an increase in target behavior and punishment indicates a decrease in the targeted behavior.

Throughout caregiver training, discussions may relate to how punishment is used, both intentionally as planned and unintentionally. Everyone's behaviors are continuously being punished via external stimuli, whether they realize it or not. While punishment procedures can be explained during caregiver training, it is recommended to only focus on those which the caregiver uses and/or those which are specific to the child's BIP.

Behavior analysts should discuss with caregivers the ethical considerations, side effects, and downsides of punishment. These may include the following:

- Response suppression is often temporary. When punishment is applied, there is often an immediate cessation of the target behavior, which may actually reinforce the caregiver's behavior of implementing the punishment. However, the behavior change may not be long-lasting. It is common for the behavior to resurface.
- The conditioning of the environment as a punisher. For example, if a child frequently experiences punishment at school, they may begin to associate school as a conditioned punisher.
- The child may engage in an increase in escape or avoidance behavior. If a child is experiencing an aversive situation, they may increase behaviors that allow them to escape the situation.
- Punishment-induced aggression may occur.
- Counter control may occur across different topographies, with the child learning to "control their controllers" (Fontes & Shahan, 2020).

## Functions of behavior

The four functions of behavior are beneficial to train caregivers on. It is sometimes challenging for parents and caregivers to understand why their child is engaging in a particular behavior. Behavior analysts and other ABA professionals often hear a variation of "I have no idea why they do XYZ. It happens out of nowhere!" Caregivers should be taught to understand that behavior never occurs randomly or for no reason. That line of thinking may lead to learned helplessness.

Consider this scenario. A child frequently engages in aggression toward his mother. She does not have training in behavior analysis. Day after day, her child hits her, and she cannot identify a reason for why he is doing it. From her perspective, if she is unable to find a reason, then she may not believe there could be a solution. Function-based interventions can have a significant impact on her child's behavior. Training her in this area could result in improvements in the child's behavior.

Caregivers should be trained on each of the four main functions of behavior: access to tangible, escape, attention, and automatic reinforcement. The procedures should be briefly explained for identifying the function of a behavior. Again, this training should be aimed toward specific procedures used in their own child's assessment. If the BCBA® conducted a functional assessment screening tool (FAST ) and analyzed ABC data, they can explain these two tools and how they were used to analyze the function of their child's behavior. The caregiver should then be taught to pay attention to the antecedents and consequences of their child's behavior to guide them in hypothesizing the function of the child's behavior.

## Antecedent-Behavior-Consequence (ABC) data

The ABCs go hand-in-hand with the functions of behavior. Caregivers should be trained on what an antecedent and consequence are and how they relate to or impact the behavior. Antecedents are any stimulus change that occurs right before the behavior. Behavior in the A-B-C includes the topography of the behavior or what the behavior looks like. A consequence is any stimulus change that occurs right after the behavior is exhibited (Cooper et al., 2020).

This may be a good time to teach the caregiver that "consequence" in layman's terms is not the same as in behavioral terms. Every behavior has a consequence-what occurs right after the behavior is the consequence. The consequence does not necessarily mean punishment.

Caregivers should be trained on how to take ABC data. This may empower them to play an active role in their child's behavior-change goals, as well as assist the treatment team in analyzing situations that they are unable to personally observe. For example, if a caregiver observes a novel behavior that they believe may need further observation, they can record data for the BCBA® to later review and provide feedback on. Before the caregivers are required to record ABC data outside of sessions, the situation should be thoroughly considered and identify whether or not this request is necessary and in the

child's best interest or if it may result in unnecessary stress. All potential barriers should be assessed and assist the caregiver in antecedent manipulations that may reduce the response effort required. For example, if their phone is typically handy, recording ABC data in an app may be easier for them than paper and pen data. If there is any electronic sharing of this data, ensure that the app is Health Insurance Portability and Accountability Act (HIPAA) compliant.

## Prompting

Caregivers should be trained on prompting procedures and prompt hierarchies. Prompts are an important component of skill acquisition, so caregivers should be well-versed in prompt methods that are most effective for their child. Discuss how to plan for and use prompting to teach new skills. Prompting is the use of supports to occasion a targeted skill or behavior.

In caregiver training, the discussion of least-to-most and most-to-least prompt hierarchies are to be considered as well as interventions using time delay and graduated guidance. If a preferred hierarchy has been identified for their child, discuss why this is used and the benefits of it. For example, least-to-most prompting is beneficial for children who have a strong repertoire of prerequisite skills. This method includes trial-and-error learning, which may be aversive for some children who struggle with responding incorrectly and being corrected. Alternatively, most-to-least may result in over-prompting but is a beneficial method for children who need a higher level of support when learning a new skill.

There are several common prompting methods that can be used: verbal, partial verbal, partial physical, HOH/full physical, modeling, and gestural. Again, when discussing these prompting methods with caregivers, focus on the methods commonly used with their child. If identified prompt preferences have been identified, discuss this with the caregiver. If, for example, it has been identified that full physical prompts are aversive to the child, while modeling and gestural prompts have been identified as beneficial, train the caregiver on each of these prompt methods and encourage avoiding physical prompts, when at all possible.

Train the caregiver on what to do when the child is not making progress in skill acquisition, despite ongoing prompting. *Troubleshooting may consist of one or more of the following considerations:*

- How long has the team been working on the skill? Is it taking longer than typical for the child's personal acquisition rate? Everyone progresses at a different pace, so while it may be typical for one child to master a skill in one week, another child may require two or three weeks to master a similar skill, taught in a similar manner.
- Is the team over or under-prompting? It is important to find the right balance between over and under-prompting. While prompts can be incredibly valuable in teaching skills, they should not be overused, as this may result in prompt dependency. Under-prompting should also be avoided. If supports are not resulting in the demonstration of the skill, then the selected prompts are not adequate.
- Are there adequate opportunities to practice the skill? If the child has not yet had enough opportunities to practice and demonstrate the target skill, then the skill acquisition rate may be slower.
- Are all stimuli or other resources available and accessible for teaching the skill? Double-check that there are not any missing stimuli that are needed for teaching the skill.
- Is the skill being reinforced? Take a look at the reinforcers offered. Are they motivating to the child? Are they preferred or aversive? Consider conducting an updated preference assessment.
- Does the skill need to be further broken down into smaller components? Create a task analysis of the skill to break it down into more manageable components.

Caregivers should also be trained on when prompts are provided within the three-term contingency.

SD → (prompt) → Response → Consequence

If the stimulus change occurs after the response (i.e., error correction), this is not actually a prompt as the prompt occasions the response. In other words, the prompt comes before the response (Cooper et al., 2020).

## Rapport development

While sometimes overlooked, rapport is an important component in caregiver training, just as it is when the child is working with staff. A strong rapport is associated with

increased instructional control or cooperation, increased skill development, and fewer targeted behaviors. For children who are experiencing low levels of compliance with their caregivers, a focus on rapport development may be needed. A systematic literature review found caregiver training to result in positive family and relationship outcomes (Factor et al., 2019).

It is important to approach this area carefully. Caregivers should be reassured that this is in no way claiming that they do not have a strong relationship with their child. Rather, discussing the benefits of rapport building and strategies for rapport building can increase their child's "buy-in" when addressing skills and challenging behaviors.

Rapport is not a one-time thing. Rapport is built, reinforced, and maintained over time by continued efforts. Rapport can be built by the caregiver having a warm tone of voice, demonstrating nonverbal communication cues that they are listening and engaged (i.e., smiling, nodding head), in close proximity, and facing the child. Training caregivers in the area of rapport development and maintenance may consist of establishing available chunks of time for the caregiver to spend exclusively pairing with the child.

*Train the caregiver on additional pairing techniques such as:*

- Following the child's interests and motivation.
- Avoiding placing demands on the child, even subtle ones (i.e., what color is this?, which of the cars is your favorite?).
- Getting on the child's level-playing on the ground or wherever the child is playing.
- Providing free access to reinforcers.
- Providing undivided attention. Put away phones or other distractors.

## Motivating operations

Caregivers should be trained on what motivating operations are and how they impact behavior. Human behavior depends in large part on what is currently desired and what is currently available. Caregivers likely do not need a full lesson consisting of diving into conditioned motivating operations (CMOs), unless related to their child's programming and beneficial for them to learn. Generally, however, a basic understanding of establishing and abolishing operations would suffice.

An establishing operation is a temporary state which increases the reinforcing value of the stimuli. An abolishing operation is a temporary state which decreases the reinforcing value of the stimuli. It is helpful to define these two operations on a deprivation-satiation continuum (Poling et al., 2017).

There are many ways that motivating operations can be used to modify the environment, thus modifying behavior. Here are a few common examples:

- Allowing access to a particular preferred toy or item contingent on the demonstration of a particular behavior. The child is deprived of this item during any other time, resulting in the reinforcer's value increasing.
- Encouraging a potty-training child to consume juice or another favorite drink. A full bladder will increase the reinforcing value of a toilet.
- Allowing a high-energy child to exude energy by jumping on the trampoline for 30 minutes before a lesson. After exuding their energy, jumping around during the lesson would be less reinforcing for the child. Therefore, they will be more likely to pay attention to the lesson without running or jumping around.

## Naturalistic teaching and discrete-trial-training

Naturalistic teaching and discrete trial training (DTT) are two common teaching modalities in ABA. Depending on the child's individual session format and their needs, caregivers could be trained on one or both of these.

Understanding how to teach skills within the natural environment can be both empowering for the caregiver and beneficial for the child. Naturalistic teaching procedures consist of presenting learning opportunities in the child's natural environment, using their motivation and interest. In the natural environment, using the child's motivation, the caregiver can be trained to contrive opportunities for teaching new skills. This should be dependent on the child's skill level and needs. Anything from mand training to safety, tacting, and countless other skills can be trained via naturalistic teaching methods (Cooper et al., 2020).

It is important to point out that DTT is not inherently negative or "bad." While naturalistic teaching has many benefits, so too does DTT. DTT is a method of teaching a skill by breaking it down into manageable components. Each learning opportunity has a discrete beginning and end. The discriminative stimulus (SD) is first presented, then followed by the response, which is then followed by a consequence. Some children

thrive in this teaching format. In this case, those caregivers should have the skills and knowledge to meet their children where they are at and teach them in the way that works for their child. ABA should always be individualized, rather than a one-size-fits-all approach.

In training caregivers on DTT and/or naturalistic environment teaching, the specific goals of the child should be focused on. The caregiver should be able to identify areas of need and distinguish between teaching formats.

## Generalization and Maintenance

Generalization and maintenance often go hand-in-hand. These are valuable concepts to train caregivers on. Generalization and maintenance are vital in skill acquisition and long-term meaningful behavior change.

Generalization is the extent to which a behavior is demonstrated under conditions outside of the original teaching situation (i.e., different stimuli, different people, settings). Maintenance is the extent to which a behavior continues to be demonstrated after the intervention is discontinued, over a period of time (Cooper et al., 2020).

*Caregivers should be trained to promote the generalization of new skills in the following ways:*

- Allowing the child an opportunity to demonstrate the skill with the caregiver after the skill is mastered in therapy sessions.
- Implementing training protocols in new locations. For example, when a child masters potty training with a small, toddler toilet, the caregiver can promote generalization by teaching the child to use the family toilet and then toilets out in the community.
- Teaching loosely. Vary the instructions and stimuli that are used when teaching skills. For example, a parent is working on their child tolerating waiting. They initially address this tolerance by using the instruction “wait.” Generalization of the instruction may consist of changing the SD to “hang on,” “wait a minute,” “hold up,” etc.
- Thin the schedule of reinforcement using a variable schedule once the child has consistently demonstrated the skill.
- Teach skills in the natural environment whenever possible.

- Use natural consequences, rather than artificial or contrived, whenever possible. Consider the consequences that will naturally occur post-intervention (Cooper et al., 2020).

*Caregivers should also be trained on the following strategies to promote maintenance:*

- Thin the schedule of reinforcement using a variable schedule once the child has consistently demonstrated the skill.
- Fade prompts as quickly as possible for the child. Avoid over-prompting or using verbal prompts which are more challenging to fade.
- Use naturally occurring reinforcers whenever possible. Aim for reinforcers the learner will naturally encounter post-intervention.
- Conduct regular maintenance checks on mastered skills. Encourage caregivers to plan to assess for maintenance of skills regularly. The frequency will vary based on the child's needs.

## Antecedent Strategies

Caregivers should be trained on general and child-specific antecedent strategies. Antecedent strategies are strategies implemented before a behavior occurs, in an effort to reduce the likelihood of the child engaging in a behavior. Antecedent manipulations can make a major difference in the rate of the targeted behavior. Competencies in antecedent strategies can also empower caregivers to take an active role in modifying the home environment to modify behavior (Cooper et al., 2020).

Caregiver training on antecedent manipulations may include several different strategies. As always, individualize this approach, focusing on antecedent strategies that are being used with their child during therapy sessions currently or those which are in their BIP.

- **Alter motivating operations.** Creating a state of deprivation by limiting access to a particular reinforcer (establishing operation) or a state of satiation by providing high rates of reinforcement (abolishing operation). Provide specific examples of how the parent can alter motivating operations with their child and what the impact would be. Noncontingent reinforcement is one way of altering motivating operations. This consists of providing free and noncontingent access to a particular reinforcer. Caregivers might be trained to provide noncontingent reinforcement during rapport building or 1:1 interaction times.

- **Rearranging the environment.** Place necessary visual cues around the home. It is important to differentiate between helpful and unnecessary visuals for the caregiver. Sometimes caregivers or therapists may get carried away with arranging numerous visuals around the home. However, they do not benefit the child and rather create overstimulation. It is important to focus more on quality over quantity of visuals. Discuss strategies for identifying what types of visuals will be most useful for their child. Further, discuss trying one visual stimulus or cue at a time and evaluating the effects before adding more or changing it.
- **Timers.** Visual timers can be very beneficial when used as a warning of the time left in an activity or the time until an activity starts or changes. These are especially useful for children who are unable to tell time.
- **Primers.** Provide warning statements or visual cues to prepare the child for upcoming transitions, expectations, or changes. These may be provided through use of social stories, videos, or through visual schedules.
- **High probability request sequences.** Train caregivers to understand the difference between high-probability and low-probability behaviors, then teach them how to use high-probability skills to build behavior momentum before providing a low-probability request. This is a simple, but useful and effective way of modifying the environment to reduce the likelihood of challenging behavior.
- **Shared control.** This is sometimes referred to as "forced choice." This consists of offering limited (i.e., two, three) choices for the child, allowing them to have control over a situation, without completely eliminating a demand. For example, for a child who struggles with the morning routine, a parent may ask "do you want to brush your teeth or wash your face first?" This provides the child with some control over their daily activities. Another example might be "do you want to wear a paw patrol shirt or ninja turtle shirt?" Either way, the child will need to get dressed. Both options presented result in following through on the morning routine which consists of getting dressed. However, this way of presenting the instruction allows the child some control, rather than if the instruction was presented as "it's time to get dressed. Put this shirt on."

## Individualized Behavior Intervention Plan

One of the most important things to train caregivers on is their child's individualized BIP. While caregivers should be trained on general strategies and concepts as well, it is

important that they fully understand and agree to their child's BIP. It is recommended to follow the steps of behavior skills training (BST) in training caregivers on the BIP procedures. See the best practices section for more guidance on behavior skills training.

## Self-help Skill Development

Children with developmental delays often experience challenges in the area of self-help skills. Train caregivers to assess their child's self-help skills and identify skills that are within their child's skill set and are age appropriate. The Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) self-help skill checklist is an excellent resource for identifying skills that are expected based on the child's age. This checklist provides self-help skills that children from 18-48 months of age would be expected to be able to do.

Oftentimes, self-help skills are complex with multiple steps. For example, for a child learning to wash their face, they need to learn to get a washcloth and face wash, wet the washcloth, wet their face, squirt face wash into their hand, scrub it on their face, rinse their face, and put the soap and washcloth away. With complex skills such as these, chaining procedures are often beneficial to break down the skill and teach it systematically. Therefore, caregivers may benefit from training on task analyses and chaining procedures. Keep this basic to start with. The different chaining procedures can become challenging to follow and differentiate. Therefore, one might start with explaining what a task analysis is and how it can be used in the development and initiation of a chaining procedure. A task analysis consists of breaking down a complex skill into a series of individual steps. In the face washing example, there were eight individual steps, encompassing the overall skill. Once a task analysis is created, a chaining procedure can be implemented to teach each step of the skill. A chaining procedure is a teaching procedure used to connect individual behaviors to form a complex skill.

Discuss a self-help goal that the caregiver identifies as a need. Walk the caregiver through creating a task analysis of the skill. Then, train the caregiver on conducting a chaining procedure for teaching the skill. Encourage the caregiver to continue working on this skill outside of therapy sessions, using the chaining procedure as trained.

## Functional Communication Training (FCT)

When children engage in challenging behaviors, it is our responsibility to teach and reinforce functionally-equivalent ways of getting their needs met, through FCT. This is a prime area that caregiver training should be focused on.

The first step is addressing how behavior is communicated. If their child is engaging in aggression, self-injurious behavior, destructive behavior, or behaviors that are otherwise interfering with their development, it is important for caregivers to understand that these behaviors are exhibited for a reason. The child is attempting to communicate something through these behaviors. Behavior analysts are to help determine the function of the behavior(s) being exhibited. However, having a general understanding and acceptance that behavior is communication, can go a long way with caregivers.

Train caregivers on general functional communication methods, as well as specific alternative behaviors for their child, given the individualized intervention plan. If an alternative behavior has not been identified, then work with the caregiver on identifying functionally-equivalent behaviors that can meet the same needs as the behaviors targeted for intervention.



## Visual Analyses

While behavior analysts may not need to train caregivers on full visual analysis competencies, they can teach caregivers to read and understand their own child's graphs. Teaching a basic understanding of graph analysis can empower caregivers to review their child's graphs in their own time to identify the progress their child is making based on the graph's level, trend, and variability. When caregivers understand how to analyze their child's data and graphs, they can be better informed on what is and is not working for their child. This can increase their ability to effectively advocate for their child.

## Section 2 Personal Reflection

Which ABA principles, concepts, or skills are most beneficial to focus caregiver training on?

## Section 2 Key Words

Abolishing operation - A temporary state that decreases the effectiveness of a reinforcer.

Antecedent - Any stimulus change that occurs directly before a particular behavior.

Behavioral cusp - Behaviors that open a learner up to access new contingencies and settings.

Bribery - Offering an incentive prior to the occurrence of a behavior, in an effort to motivate the individual to engage in a particular behavior. Bribery is not an ABA concept.

Consequence - Any stimulus change following a particular behavior.

Discrete trial teaching (DTT) - A structured and systematic teaching procedure consisting of each learning opportunity having a discrete beginning and ending point from SD to response to consequence. If needed, the prompt occurs after the SD, but before the response.

Establishing operation - A temporary state that increases the effectiveness of a reinforcer.

Generalization - The degree to which a behavior is demonstrated under different conditions than the teaching setting ( i.e., new people, new stimuli, new settings).

Maintenance - The degree to which a behavior change lasts across time after the intervention has been discontinued.

Natural environment teaching (NET) - A teaching procedure consisting of using a child's motivation in their natural environment to teach new skills.

Pivotal behavior - A learned behavior that leads the individual to engage in new behaviors without training.

Prompt - Supplemental antecedent stimuli that occasion a targeted response.

Punishment - The addition or removal of a stimulus, resulting in a decreased occurrence of the targeted behavior.

Reinforcement - The presentation or removal of a stimulus following the occurrence of a behavior, which results in an increased occurrence of the target behavior.

Social validity - Refers to the social acceptability and importance of treatment goals and interventions.

## Section 3: Best Practices

The use of behavior-analytic techniques in caregiver training is recommended for the best possible outcomes. The principles of behavior work beyond simply applying them to our clients. Principles of behavior can be equally applied to caregivers. BCBA®s should develop caregiver training protocols based on empirically derived knowledge. Each of the following practices can be used within caregiver training, whether provided virtually or in person. A combination of the following methods may be used in developing evidence-based caregiver training procedures.

### Behavior skills training (BST)

One of the most effective methods of training caregivers is through BST. BST is a scientifically backed method of teaching skills that utilizes four main steps. The steps to BST include instruction, modeling, rehearsal, and feedback. BST can be used to teach a wide array of skills to many different populations. Researchers have found that a behavior skills training program for caregiver training results in significantly higher positive outcomes than providing written instructions alone (Boutain et al., 2020).

When training caregivers via BST, whether in-person or through telehealth, the following steps should be followed.

1. **Instruction.** Instructions are provided either vocally or in a written format. It is recommended that both written and vocal instructions are provided for full clarity. The instructions provided should be clear, concise, and complete. Provide adequate detail in layman's terms. Avoid using jargon that the caregiver is unfamiliar with. Provide examples and non-examples. Caregivers are more likely to follow treatment recommendations when they understand the significance behind them. Therefore, explain not only what the concept is, but why this recommendation is being made.

   *Example:* Vocally reviewing written documentation explaining preference assessments. Describe what they are, how they are used, what information might

be gathered through preference assessments, and how they can be used in therapy, as well as at home with caregivers.

2. **Modeling.** Demonstrate the application of the concept for the caregiver. In-person caregiver training offers the opportunity to demonstrate the skill with the child (if the child is present). However, a commonly used alternative is video models. The BCBA® may provide a video demonstration of themself or someone else demonstrating the skill at hand. It may be beneficial to narrate the steps along the way.

   *Example:* During an in-person training session, a BCBA® demonstrates running a paired choice preference assessment with the child, while the caregiver observes.

3. **Rehearsal.** This is the opportunity for the caregiver to practice the skill. There are a few ways to do this. The behavior analyst and the caregiver may role-play the skill, with the caregiver demonstrating the application of the skill. Alternatively, the caregiver may rehearse the skill by practicing with their child or another individual. Either way, the caregiver would get the chance to put the instructions and modeling into practice. Applying the skill is a vital component of demonstrating that they understand the concept.

   *Example:* The caregiver demonstrates one round of a paired choice preference assessment, while the BCBA® observes.

4. **Feedback.** Following the caregiver's opportunity to demonstrate the skill, the behavior analyst provides feedback. Provide behavior-specific feedback regarding their application of the concept or skill. It is important to be clear about what specifically they did correctly and what needs improvement. Whenever possible, feedback should be immediate.

   *Example:* The BCBA® says "great job presenting two options and allowing your child to pick one. You were very careful to remove the item after the indicated time allotment. Let's try again, with you continuing through the full process."

Following the step involving feedback, consider whether the caregiver has demonstrated competency in understanding and applying the concept. If they have not demonstrated competency at the mastery level pre-identified, then repeat steps, as needed, until mastery is achieved. This is another key component of BST. Once feedback is complete, the process is not necessarily over. Go back through each step and repeat, identifying

gaps in understanding and addressing those. Once the caregiver shows they fully understand and can apply the skill or concept with their child, then the skill is mastered.

## Acceptance and Commitment Therapy (ACT)

ACT is an approach to addressing verbal behavior that is involved in behavioral rigidities. Increasing psychological flexibility is the optimal goal of ACT. Psychological flexibility refers to one's ability to contact the present moment, regardless of unpleasant thoughts and feelings, based on one's personal values. According to ACT, there are six functionally defined behavioral repertoires that are involved in psychological flexibility. These comprise the six points of the ACT Hexaflex, which is the core of ACT. The Hexaflex includes the concepts of acceptance, defusion, present moment attention, self-as-context, values, and committed actions (Tarbox et al., 2022).

Parenting is a challenge for all caregivers at one time or another. However, parents with children with ASD experience higher rates of psychological stress, as well as depression and anxiety. Behavior analysts are not typically trained to treat depression, anxiety, and other psychological or mental health challenges, nor would that be expected via caregiver training. However, through the integration of ACT in ABA caregiver training, behavior analysts can address the verbal behaviors of caregivers that are related to psychological inflexibility. This application of ACT via caregiver training can result in improved caregiver and client outcomes (Tarbox et al., 2022).

The primary goal of ACT is living within one's values. To conceptualize values behaviorally, consider them as rules. These rules function as verbal motivating operations that then increase or decrease the effectiveness of stimuli as reinforcers or punishers. This then supports the occurrence of overt behaviors that produce those stimuli (Tarbox et al., 2022).

## Values

There are different ways of using a values-driven approach in directing caregiver training. One method is to discuss the caregiver's values as they relate to the client and overall family well-being and functioning. It is encouraged to provide a values exploration form to help the caregiver evaluate their values. Some values may include ability, compassion, flexibility, mindfulness, order and success (Tarbox et al., 2022).

Encouraging the parent to identify a few of their most important values and creating a unique values statement relating to their highest priority value(s) can be beneficial to caregivers. For example, “I value flexibility in myself, my child, and others” can be an important values statement for an individual. This identification of their highest priority value is both beneficial for the caregiver and for the BCBA®. From the BCBA®s perspective, this knowledge can lend highly valuable information in determining the progression of treatment goals for both the client and the caregivers. Knowing that flexibility is a value for the caregiver, the BCBA® can further evaluate how that may relate to particular goals. Addressing a child’s rigid behavior and inflexible adherence to routines are likely to be areas of directed focus for a caregiver who values flexibility.

From the caregiver’s perspective, identifying and declaring their values results in an increased likelihood of engaging in behaviors that support their value(s). In the example of valuing flexibility, a caregiver may be more likely to follow through on treatment protocols that are related to increasing flexible behaviors in their child. Alternatively, for a parent who does not value flexibility and perhaps instead highly values independence, focusing treatment and recommendations on flexibility may not result in a high likelihood for follow-through and buy-in (Tarbox et al., 2022).

Interventions created from a values-directed approach may enable the behavior analyst to add powerful intermediary reinforcers during aversive situations. This provides the caregiver with the motivation needed to proceed through the challenging situation.

Another values-exploration activity is called “The Three Wishes.” This procedure consists of asking the parent to imagine that they have three wishes for their child. The behavior analyst asks them what those three wishes would be if they could wish for anything. This, again, will help the behavior analyst identify the direction of treatment and create interventions and goals that are aligned with these values. Identifying caregivers’ values and understanding what their big picture is can lead behavior analysts to establish goals that are aligned with what is most important to them.

**Fictional scenario example:**

*BCBA®: Imagine you could have three wishes for your child. They can be anything in the world. What would your three wishes be?*

*Parent: I definitely want my child to be able to communicate with me. I want them to be able to express their needs, emotions, etc. I would also love to see them establish and maintain a friendship.*

*BCBA®: Thank you so much for sharing those wishes. I'm hearing that communication and friendship are really important to you. I would love to focus our training sessions on those areas.*

*Parent: That sounds wonderful, thank you.*

*BCBA®: Of course! The first area I would like to focus on is developing a mode of communication that works for your child.*

The BCBA® can then go on to discuss how the child currently communicates, how they get their wants and needs met, what barriers to effective communication are in place, what skills they need to develop, etc. The BCBA® could recommend a mode of communication that would be best to focus on, given the child's current skill set and communication abilities. From there, the BCBA® would structure both client and caregiver goals around those priorities.

This activity may help to develop rapport between the behavior analyst and caregiver as well. It demonstrates sincere interest in what is most important to the caregiver and family through active listening.



## Present moment attention

Another component of ACT is present moment attention, otherwise referred to as mindfulness or present moment awareness. According to Tarbox et al. (2022), "mindfulness involves strengthening one's repertoire of attending to stimuli in the present moment while weakening one's repertoire of attending to one's own verbal behavior with respect to past, future, or imagined events." Helping our client's parents and other caregivers strengthen their present-moment attention repertoire can increase their sensitivity to environmental contingencies. Training caregivers on present-moment awareness may also weaken sources of verbal stimulus control that are not beneficial to the caregiver (Talbox et al., 2022).

Present moment attention training involves explaining this component of ACT to the caregiver, then systematically teaching them to discriminate between times when they are in contact with current contingencies versus when they are "in their heads." In other words, staying in the present moment rather than attending to private verbal stimuli such as "why does he keep doing this?," "I can't do this," "I can't focus." "I'm way too overwhelmed to deal with this right now," etc. The caregiver should be encouraged to

maintain contact with overt environmental stimuli. Furthermore, the caregiver should be trained to pay attention to their own attending behavior. When they notice their attention has subsided, they should redirect their attention back to the current moment. This process consists of tacting (labeling) one's own lack of attention. The occurrence of tacting one's wandering attention serves as a discriminative stimulus for redirecting their attention back to the present moment. (Talbox et al., 2022).

*This fictional client scenario provides an example of how this present-moment awareness can be implemented in a caregiver's natural environment.*

A client is engaging in screaming, crying, and head banging. His mother begins to think (i.e., private verbal stimuli) "I cannot do this today. Ugh, what is it now? I need a break. I'm exhausted from this constant screaming." As the mother is engaged in this private verbal behavior, she is disengaged from the stimuli of the present situation (i.e., her child screaming, crying, and head banging). She realizes that she is not engaged with the present moment, so she refocuses her attention on the present moment. Her ability to focus on the present moment helps her to clearly think about the strategies that the BCBA® has trained her on and implement those in response to the challenging behaviors. She is able to identify that her child wants or needs something. She locates his PECS binder and prompts him through requesting for a snack.

By engaging in the present moment, she is allowing herself to focus only on the current situation, resulting in a more adaptive response to the child's behavior, which then resulted in the child contacting reinforcement contingent on manding (Tarbox et al., 2022).

## Acceptance

Acceptance in ACT can be conceptualized as the absence of any avoidance or escape behavior when aversive stimuli are present. Caregivers of children with ASD and other special needs often experience aversive stimuli in the form of challenging behaviors before their child learns new, more adaptive skills. Acceptance allows caregivers to engage in more adaptive behaviors, thus contacting more natural reinforcers. Acceptance is a key tool to train and reinforce when a caregiver's response to their child's behavior is maintained by escape or avoidance. Acceptance involves the process of weakening rule-governed, negatively reinforced behaviors. This occurs by evoking and reinforcing the ability to come into direct contact with stimuli or events that were previously found to be aversive. For example, if a child's screeching behavior is

maintained by tangible items in the form of electronics and their father finds this screeching aversive, he may negatively reinforce the screeching by immediately providing access to the child's tablet in order to discontinue the aversive stimuli. In the short term, the father's behavior resulted in the child's screeching to cease. Because of this, the father is more likely to provide access to the tablet contingent on screeching in the future. In the long term, this results in an increased likelihood of the child engaging in screeching to gain access to his tablet. Put another way, the father's behavior is maintained by negative reinforcement, which then positively reinforces the child's behavior. This becomes a challenging cycle to break and thus an important area to focus on in caregiver training. Acceptance would allow the father to actively engage and not engage in escape-maintained behavior (Tarbox et al., 2022).

Modeling acceptance is one way that behavior analysts can train caregivers on this concept (Tarbox et al., 2022). When training caregivers on behavior-change procedures, BCBA®s should be open and honest about any challenges or barriers that may occur. For example, when training on extinction procedures, behavior analysts may explain to the caregiver how it can be a procedure that is challenging, particularly at first, to follow through on. Be honest about how much easier it is in the moment to give in and reinforce the behavior. Explain that by doing so will result in reinforcing the challenging behavior, and therefore the behavior will continue to occur. Then, during a challenging behavior, when the caregiver is following the extinction procedure, model acceptance by stating something like "I know this is difficult. You're doing great sticking with it. We will get through these difficult times."

## Defusion

Defusion refers to the process of recognizing one's own thoughts as environmental stimuli which cannot control behavior. "Fusion" refers to excessively rigid rule-governed verbal behavior. Therefore, defusion weakens this rigid control of rule-governed behavior. This occurs through disrupting inflexible functions of thoughts/private verbal stimuli. In doing so, a much more flexible repertoire of behavioral responses can be enabled when those thoughts arise (Tarbox et al., 2022).

Defusion involves the process of training one to attend to the process of their own thoughts. This is a beneficial skill to train for caregivers who engage in private verbal stimuli (i.e., thoughts) that dominate their attention, resulting in ineffective patterns of

behavior. BCBA®s can train caregivers to pay attention to their thoughts and tact them as simply thoughts, not facts (Tarbox et al., 2022).

## Self-as-context

Self-as-context can be conceptualized as a repertoire of flexible perspective-taking behaviors. A self-as-context procedure will include shaping flexible verbal behavior. This is a vital component for caregivers who experience private events related to self-conceptualizing their role as a parent and expectations for how to respond to their child's behaviors which are inflexible and are not values-directed (Tarbox et al., 2022).

For an example of a caregiver who might benefit from training on self-as-context, imagine a parent who is not following through on treatment recommendations. They may state that they are simply a pushover and cannot be firm with their child. The parent has set this inflexible view of themselves, which does not align with their values. This inflexibility is hindering their child's ability to progress through goals and reduce interfering behaviors. In this case, the behavior analyst should recognize and acknowledge the caregiver's struggle. They can further discuss how when someone gets stuck on a particular belief about how they must act or respond in certain situations, it is helpful to reframe these beliefs. The beliefs may be particular to certain situations but do not have to dictate one's every action in each situation. Therefore, the behavior analyst would encourage the caregiver to restate this belief with added perspective (Tarbox et al., 2022).

There is overlap in self-as-context and defusion, which are both procedures that aim to reduce rigid rule-governed behaviors. The main difference is that in self-as-context, the rules are related to one's self. These rules describe the expectations of how one should act. Defusion relates to rules regarding the outside environment. The main takeaway between both processes is that the caregiver's thoughts do not need to maintain control of their actions. Thoughts can be thought of as simply private environmental stimuli. They are not necessarily facts. Training caregivers to recognize their thoughts as simply thoughts, can help reduce ineffective behavioral patterns, in relation to the ways in which they respond to their child(ren)'s behavior. To further conceptualize this behaviorally, consider defusion and self-as-context techniques to be functionally-equivalent replacement behaviors (Tarbox et al., 2022).

## Committed actions

The eventual goal of ACT is committed action. Committed actions include an overarching response class of overt behaviors which are socially significant and lead one in the direction of their values. All of the other components of the ACT hexaflex work in combination to create a context for engaging in more frequent patterns of values-directed actions (Tarbox et al., 2022).

Values-directed action consists of self-assessing and identifying whether one's behavior is consistent with their values. This goes back to the importance of establishing the caregiver's values, specifically as related to their child, at the start of ACT-based caregiver training. By establishing their values at the start, behavior analysts can continuously re-evaluate whether the caregiver's responses to their child's behavior and their participation in treatment are aligned with their values. Values and values-directed action should continue to be incorporated throughout the duration of caregiver training (Tarbox et al., 2022).

Behavior analysts can directly instruct the caregiver to establish clear and concise goals that are oriented toward their values. This can also be of benefit for the caregiver to assess whether the child's treatment progression is in line with their values.

The ultimate goal of ACT is to build behavioral flexibility through the development of the six repertoires as demonstrated in the hexaflex. Some of these repertoires will need more time and dedication than others, depending on the needs of the caregiver. As always, treatment should be individualized and goals should be identified via a baseline assessment of skill (Tarbox et al., 2022).

## Caregiver training homework

Caregiver training should be focused on providing caregivers with strategies and confidence to implement behavioral principles outside of therapy sessions. BCBA®s, therefore, are likely to assign "homework" or tasks for the caregivers to do between caregiver training sessions. This can be either highly beneficial or an added stressor for the family. Consider the following when providing assignments for the caregivers to do in between sessions.

1. The time commitment associated with the tasks and the caregiver's availability. Avoid having excessive expectations that are unrealistic for the caregiver's available time. For example, if the caregiver's time is extremely limited, tasks

assigned should focus on applying principles taught to the natural environment with their child, rather than additional education such as reading articles or online training.

2. The social significance of the assignments. Consider how the assignment will benefit the client, caregiver, and the family unit. Any homework assigned should not be "busy work." Only assign tasks that truly are likely to result in improvements for the family.

## Section 3 Personal Reflection

Which practices have you personally used in your caregiver training? Which have you found beneficial? Which do you feel would be helpful to further explore?

## Section 3 Key Words

Acceptance - A component of ACT consisting of the absence of escape or avoidant behavior in the presence of aversive stimuli.

Acceptance and commitment therapy (ACT) - An approach to addressing inflexible verbal behavior in order to increase psychological flexibility. ACT consists of six main focuses: values, present moment awareness, acceptance, defusion, self-as-context, and committed actions.

Behavior skills training (BST) - An evidence supported intervention for teaching new skills consisting of instruction, modeling, rehearsal, and feedback.

Committed actions - A component of ACT wherein the individual takes clear actions that are aligned with their values.

Defusion - A component of ACT; The process of recognizing one's own thoughts and considering thoughts simply as internal environmental stimuli. Thoughts cannot control our behavior.

Present-moment awareness - A component of ACT associated with experiencing stimuli in the present moment, attending to one's own thinking and redirecting wandering thoughts.

Self-as-context - A component of ACT wherein the individual attends to their own thoughts, feelings, and actions from an outside perspective.

Values - One component of ACT that consists of identifying what is most important to the individual.

## Section 4: Telehealth Caregiver Training

Caregiver training has historically and primarily been provided in person via home or office visits. When the pandemic hit in early 2020, companies began temporarily closing down for the safety and health of clients, families, and staff. Treatment providers began scrambling to identify ways of continuing to support their client's families without being physically present. This opened up a sudden surge of needs being met through telehealth services. Telehealth was not brand new at this point. In fact, telehealth in the behavioral health field increased by nearly 70% between 2014 and 2016, four years before the pandemic started, according to the Centers of Medicare and Medicaid Services (Samson et al., 2020). However, the widespread necessity of telehealth during the pandemic significantly increased the awareness of this treatment modality in our field.

Telehealth is a particular mode of delivering healthcare. Telehealth is the provision of healthcare services via telecommunication and digital communications. It is not considered a separate healthcare service. Therefore, the services provided via telehealth must be functionally equivalent to that which would be available and provided in person. Caregiver training through use of telehealth involves the same procedures of teaching caregivers skills, behavioral principles, and behavior interventions as it would if provided in person.

### Benefits to telehealth for caregiver training

Providing caregiver training through use of telehealth modalities allows for access to necessary services for those who may not otherwise be able to access care. Benefits specific to telehealth provision of caregiver training include:

1. **Access to care for folks in rural communities.** Many communities across the country have limited access to high-quality or any care. Families might need to travel an hour or more in some areas in order to receive caregiver training and/or ABA therapy.

   Telehealth-implemented caregiver training offers immense benefits for these families.

2. **Access to care for waitlisted families.** With the rising rates of ASD comes an increased need for ABA therapy. With this need comes the necessity for behavioral caregiver training. Despite the number of behavior analysts significantly rising over the last several years, there continues to be a challenge with having enough providers to meet the need. In particular, behavior technicians/registered behavior technicians are in high demand for direct ASD treatment. While families are awaiting direct services, telehealth caregiver training may be offered by many providers. This allows families who are waiting on direct care to begin accessing support to learn strategies to best support their children.

3. **Access to care for families who are unable to attend in person.** The pandemic certainly taught the world that life can change quickly. When people are sick, potentially had contact with someone who is sick, or stay-at-home orders are limiting their contact with the outside world, having a backup plan is vital. Consistency of care is important for ongoing progression. Regressions are common when care is suddenly discontinued. For families who are experiencing illness or are otherwise unable to access in-person care, telehealth provides the opportunity for this continuity of care (Luna, 2021).

A literature review on telehealth delivery of caregiver training found promising results (Luna, 2021). The review found that in the majority of the research studies, a decrease in targeted behavior through the application of telehealth caregiver training was achieved. This literature review focused on functional assessment and functional communication training aspects of caregiver training.

## Telehealth delivery modalities

There are multiple formats of telehealth delivery. The format chosen will depend on the necessary time and resources available, the caregiver's preferences, the BCBA®'s recommendations, and the funding source's pre-authorization or approval. Most insurance plans will only authorize synchronous modes of caregiver training. It is the BCBA®s responsibility to ensure that each child's authorization includes approval for telehealth-based delivery of caregiver training.

### *Synchronous*

Synchronous delivery of caregiver training would involve either live videoconferencing or telephonic interactions. Live video conferencing includes live, two-way communication between the caregiver and behavior analyst using telecommunications that include both audio and video. In other words, the behavior analyst can both see and hear the caregiver, and vice versa. Zoom and GoogleMeet are common formats for this type of communication. This is the primary mode of caregiver training that most insurance plans will cover (if they do cover telehealth). Telephone interactions are another synchronous mode of telehealth delivery. This consists of real-time voice communication (i.e., phone) without the video component. It is again vital that you confirm each client's authorized benefits to determine if telephonic interactions are an authorized modality of telehealth delivery. Many insurance plans will only allow for videoconferencing to be billed.

### *Asynchronous*

While most insurance plans will not cover asynchronous telehealth caregiver training, some behavior analysts provide out-of-pocket or non-billable services, including those that are asynchronous. Asynchronous telehealth training may include the caregiver recording video and audio interactions and sending them via a HIPAA-compliant manner, to the behavior analyst. These videos may include interactions the caregiver has with the child, the caregiver demonstrating trained skills with the child, the child engaging in a particular behavior that the caregiver is seeking guidance on, etc. The ability to record videos of these interactions and then forward them on to the behavior analyst to review in their available time can be very beneficial. The behavior analyst may provide an asynchronous response to the caregiver, whether through an email or video recording of their feedback. Alternatively, the behavior analyst may observe the video, then further discuss it, providing feedback and guidance, at the next synchronous/live session. Asynchronous training may also be provided via recorded trainings that the behavior analyst provides to the family. The family would observe the videos or training material on their own time.

### *Hybrid*

Another option for caregiver training is a hybrid model of caregiver training, including both in-person and telehealth-based training. This may be beneficial for caregivers who benefit from meeting 1:1 without their child present, as well as receiving live, in-person training when their child is present, to train them in the moment. During the 1:1

telehealth trainings, the behavior analyst may train the caregiver on concepts, discuss intervention plans, evaluate goal progress, etc. During the in-person training, the behavior analyst is able to then be physically present to guide the parent through the procedures in real-time, with the child present. This can be a very beneficial format for many families if it is feasible for the family and provider.

### Section 4 Personal Reflection

How can the BCBA® ensure telehealth-delivered caregiver training is functionally equivalent to caregiver training provided in person?

### Section 4 Key Words

Asynchronous (telehealth) - The provision of telehealth services via non-live modes.

Hybrid caregiver training - Providing caregiver training in two formats, both in-person and via telehealth modalities.

Synchronous - The provision of healthcare services via live, two-way communication. This is eithe telephonic communication or video-audio conferencing.

Telehealth - The provision of healthcare services via telecommunication and digital communications.

## Section 5: Ethical Considerations

Behavior analysts are bound to ethical guidelines per the Ethics Code for Behavior Analysts (Behavior Analyst Certification Board, 2020). There are multiple ethical considerations in developing and implementing a caregiver training program. Additional considerations are necessary to be made when providing training via telehealth. Behavior analysts are responsible for knowing and understanding the Ethics Code for Behavior Analysts (Behavior Analyst Certification Board, 2020). Several ethical codes and how they relate to providing ethical caregiver training, both in person and via telehealth modalities, will be reviewed.

## Conforming with legal and professional requirements (1.02)

All legal and professional requirements for providing caregiver training must be maintained. This includes obtaining state licensure in any state(s) that the BCBAⓇ is providing ABA services, including caregiver training, whether in person or remotely. Behavior analysts who offer caregiver training remotely may provide this care to individuals in states outside of their home state. If this is the case, they must confirm licensure requirements and any other legal considerations before providing services to individuals outside of their state of residence and licensure (Behavior Analyst Certification Board, 2020).

## Scope of competency (1.05)

Behavior analysts must practice only within their identified scope of competence. This requirement extends to caregiver training. BCBAⓇs must only provide caregiver training within the scope of their current competence. It is highly recommended that newly minted BCBAⓇs obtain supervision or mentoring in caregiver training, particularly if they did not have training in this area during the accrual of their fieldwork hours. Caregiver training offers immense benefits. However, poorly trained behavior analysts can potentially do more harm than good (Behavior Analyst Certification Board, 2020).

For behavior analysts who are inexperienced with telehealth-based services, including the technical requirements of such, they must also access training and/or supervision prior to providing telehealth caregiver training or other telehealth-based services. Prior to agreeing to conduct caregiver training using a telehealth modality, it is recommended that behavior analysts conduct a self-evaluation to determine competency in telehealth treatment (Behavior Analyst Certification Board, 2020).

Behavior analysts providing telehealth services, including caregiver training, should receive training on clinical skills related to teletherapy. One of the four areas of clinical competencies in ABA, according to Lerman et al. (2020), is parent training/coaching. The author recommends against a blanket belief that clinical skills that can be demonstrated in person will easily transfer to a remote setting. Rather, it is encouraged that behavior analysts and other ABA clinicians acquire a clinical skill set specific to telehealth treatment prior to agreeing to take on caregiver training in this setting.

## Maintaining competency (1.06)

BCBAⓇs are required to accrue 32 continuing education units (CEU) per two-year cycle. Four of those 32 credits must be ethics CEUs and three must be supervision CEUs (this will increase to four supervision CEUs in 2027). Supervision CEUs are only required for those who are providing supervision. There are no requirements for accessing a particular number of caregiver training or telehealth-based CEUs. However, behavior analysts must actively engage in professional development activities that are related to their areas of expertise and current practices. It is strongly recommended to continue accessing continued education in these domains, and reviewing new literature and best practices, in order to maintain and enhance competencies (Behavior Analyst Certification Board, 2020).

## Providing effective treatment (2.01)

Behavior analysts prioritize their client's rights and needs in service delivery. Caregiver training must be provided conceptually consistent with behavioral principles, evidence-based, and created to optimize desired outcomes, while protecting clients and stakeholders from harm (Behavior Analyst Certification Board, 2020).

While telehealth caregiver training has increased in popularity over the last couple of years, it is not a one-size-fits-all approach. Behavior analysts must carefully assess whether the caregiver and client will benefit from caregiver training being provided remotely. Some caregivers do need additional support and benefit from a behavior analyst being physically present and able to model the procedures in their presence with the child. Telehealth creates challenges for doing so. If telehealth is unlikely to result in effective treatment for the client and caregiver, the behavior analyst must recommend alternative treatment modalities. Similarly, if challenges arise with in-person caregiver training, behavior analysts must troubleshoot barriers and potentially recommend alternative treatment modalities such as telehealth training. For example, if caregiver training is a challenge in-person due to the child being present during sessions when the behavior analyst and parent need to speak in isolation, telehealth may offer a more appropriate alternative to achieve this.

## Protecting confidential information (2.03)

Our clients' information must be kept confidential. Telehealth systems create additional considerations for the protection of protected health information (PHI). Behavior analysts must use platforms that are HIPAA-compliant in all telehealth communications, both synchronously and asynchronously. Text messaging and other non-encrypted methods of communication should be avoided. The following vendors offer HIPAA business associate agreements (BAAs) with their video communication platforms and therefore may be an option for providing telehealth training::

- Skype for Business / Microsoft Teams
- Updox
- VSee
- Zoom for Healthcare
- Doxy.me
- Google G Suite Hangouts Meet
- Cisco Webex Meetings / Webex Teams
- Amazon Chime
- GoToMeeting
- Spruce Health Care Messenger

*Note: This is not an endorsement of any particular platform. It is the behavior analyst's responsibility to research each potential vendor and confirm HIPAA compliance before proceeding*.

Additional safety protocols should be implemented such as creating unique passcodes to enter video conferences for each client and caregiver. Another option may be to lock meeting rooms so outside individuals are unable to join. Additionally, be sure to not share passcodes or meeting links with outside individuals. Only send this through a secure means.

In addition to all of the safety protocols related to the software and platforms used, professionals must take precautions to structure their work environment to avoid family members, coworkers, or any other individuals from entering their workspace,

overhearing their communications, or otherwise coming into contact with a client's private health information (PHI). A BCBA®'s workspace should have a locked door. If working from home, family members should be informed to not enter during sessions.

## Accuracy in service billing and reporting (2.06)

Behavior analysts are responsible for accurate billing and documentation practices. Behavior analysts do not implement nor bill for non-behavioral services when the authorization or contract is for behavioral services. Activities of caregiver training must be implemented per the funding source's requirements, with accurate and thorough supporting documentation.

The current procedural terminology (CPT) code associated with caregiver training is code 97156: family adaptive behavior treatment guidance. Covered activities under this code include face-to-face instruction provided to caregivers with a focus on behavior reduction and skill acquisition, following the plan of care. Face-to-face refers to care provided synchronously (i.e., each participant attending training in real-time). Face-to-face does not indicate that training must be provided in person. That would be determined by the individual's insurance or Medicaid plan.

The following documentation is generally required to confirm the service delivery of code 97156. Confirm documentation requirements per payor, however.

1. Name of the rendering provider
2. Name of staff and caregiver(s) present
3. Location of service
4. Potential treatment targets identified and/or discussed
5. Training, demonstration, observation, and/or feedback provided
6. Next steps, plans for modifications, homework assigned, etc.
7. Rendering provider's signature

## Communicating about services (2.08)

It is vital that behavior analysts communicate with caregivers prior to starting services, clearly explaining the expectations of caregiver involvement. This should be

communicated in layman's terms, avoiding the use of jargon or non-direct language. Assess for body language and other signs that the caregiver understands and is in agreement. A discharge plan should be clearly outlined and explained, including whether failure to attend caregiver training and/or failure to adhere to treatment recommendations would result in discharge.

Throughout treatment, behavior analysts continue to use language that matches the level of understanding of the parent or caregiver.

As caregivers begin to develop competencies within the principles of behavior, certain terminology will be added into BCBA®-parent communication (i.e., mand, chaining procedure). However, each term should be thoroughly explained and trained to competency before including those types of jargon terms into discussions(Behavior Analyst Certification Board, 2020).

## Involving clients and stakeholders (2.09)

Behavior analysts must make reasonable efforts to include stakeholders in treatment throughout the duration of services. BCBA®s should include caregivers, family members, and other stakeholders in the process of selecting goals, designing assessments, implementing behavior-change interventions, and ongoing progress monitoring (Behavior Analyst Certification Board, 2020).

Structured and ongoing parent training is the most thorough manner of ensuring compliance with this ethical requirement. Through caregiver training, whether in-person or via telehealth, behavior analysts can include parents and caregivers in the development and decision making processes related to all aspects of treatment.

## Obtaining informed consent (2.11)

Informed consent is a necessary protection for the client's and caregiver's welfare that is established by explaining the risks and benefits of the services available. Caregivers must be allowed to make an informed decision about whether or not to proceed with caregiver training. When caregiver training is being offered via telehealth, behavior analysts must be able to explain how they will benefit from this mode of treatment, why this mode is recommended or will be of higher benefit for the family, and what the potential risks are (Pollard et al., 2017).

Additional consents are required for telehealth-based treatment. Behavior analysts should obtain signed telehealth release forms, which thoroughly describe the risks and benefits of utilizing telehealth services. Included in this document should be the risks to privacy and confidentiality, as this risk is higher via a telehealth service model as compared to in-person models (Pollard et al., 2017).

## Addressing conditions interfering with service delivery (2.19)

When barriers to effective treatment guidance are identified, behavior analysts are responsible for removing or minimizing the interfering variables. If the modality of treatment is contributing to barriers in ongoing progress, the behavior analyst must make reasonable efforts to switch service delivery methods. Therefore, if the caregiver is making minimal progress through telehealth-based caregiver training, it should be evaluated whether in-person treatment may be of more benefit (Pollard et al., 2017).

Whether provided in person or via telehealth, behavior analysts must continually assess the caregiver's progress and identify when conditions are present that interfere with service delivery. See the barriers section for potential conditions impacting service delivery and methods for troubleshooting.

## Responsibility to clients (3.01)

Behavior analysts have a primary responsibility to their clients, above all else. In the development of a caregiver training program, behavior analysts must thoroughly assess whether their actions are in the best interests of the client (Behavior Analyst Certification Board, 2020).

When evaluating whether or not to conduct telehealth-based caregiver training, consider the benefits that it would provide for the client. Caregiver training affords the opportunity to teach caregivers vital strategies for teaching their children new skills and reducing interfering behaviors.

## Accepting clients (3.03)

Behavior analysts must only accept clients who fit within our identified scope of competence and available resources. Therefore, behavior analysts should consider whether or not telehealth caregiver training is clinically appropriate for the caregiver and for ourselves as behavior analysts, before proceeding. While telehealth-based

services play a vital role in ensuring caregivers around the world can access ABA parent training and other services, it is not a perfect match for everyone.

*In identifying whether telehealth caregiver training is appropriate for a given family, consider the following:*

1. **The child's needs and severity of deficits and targeted behaviors.** For children with significantly challenging behaviors such as high-intensity aggression or self-injurious behavior, telehealth-based caregiver training may not be the most beneficial treatment modality for that particular family. This is particularly true if the family has minimal previous ABA training. If this is the case, behavior analysts must conduct a risk/benefit assessment to identify whether the family is likely to be able to access alternative care, in person. If alternative caregiver training options are unavailable, the behavior analyst may determine that the potential benefits of virtual caregiver training outweigh the risks associated with continuing without caregiver training.

2. **The caregiver's access to resources.** In order for telehealth to work, technological resources must be consistently accessible. Caregivers will require, at minimum, access to a device with internet access. If the family has inconsistent access to the internet and/or devices, consistency of care may be a barrier. Therefore, it may be determined that telehealth-based caregiver training is not the best fit for the family at the given time. Behavior analysts should make reasonable efforts to support the family with resources for accessing affordable internet to attempt to bridge the gap to reduce this barrier. They might provide resources for accessing free or reduced internet, which may be available for families below a certain income threshold.

3. **The funding source's requirements.** If the family is paying for caregiver training through insurance or Medicaid, it is crucial that the BCBA® first confirms benefits to determine whether their funding source allows for caregiver training provided via telehealth. Many insurance providers allowed for temporary telehealth-care during the pandemic. Some of these providers are continuing to authorize telehealth, though some are not. Before proceeding with telehealth-based caregiver training, confirm with the insurance plan that telehealth is a covered mode of care. If the plan does not approve telehealth, then telehealth may not be the best fit for the family, unless paying out of pocket is an option.

4. **The caregiver's preferences.** Assess whether the caregiver wants or prefers telehealth-based caregiver training. Ensure they have a thorough understanding of what virtual training would consist of so they can make an informed decision on whether this is the right approach for them. If caregivers report concerns or barriers to telehealth, offer solutions. However, if the caregiver maintains that they prefer in-person parent training, respect this choice and implement a new plan for service delivery (Baumes et al., 2020).

5. **Caregiver's availability.** One benefit of telehealth delivery of caregiver training is that it offers the opportunity to provide access to training for caregivers with busy schedules, who may not be able to participate in in-home training sessions. However, it should still be assessed whether the caregiver has availability within the same time frames as the BCBA®. With the potential for working with families outside of one's home state, pay attention to time zones when reviewing availability and scheduling caregiver training.

## Facilitating continuity of care (3.14)

Behavior analysts must make all attempts to avoid interruption of services, making appropriate and timely efforts to facilitate continuity of care. The Covid-19 pandemic has shown us how quickly life can change for all of us. Clients and caregivers in many areas had to suddenly pivot to receiving telehealth care without much preparation. Behavior analysts around the world quickly learned about telehealth technology and made changes to adapt in order to continue serving families.

A client may become sick with covid or covid-like symptoms (or any other illness), resulting in a temporary discontinuation of in-person treatment. A family may experience bed bugs, lice, or another challenging situation that requires them to put a hold on in-home treatment. Alternatively, a child who receives exclusive telehealth-based therapy may lose power, internet, or be unable to access a reliably working device. Knowing this, it is important to have contingency plans for all clients.

Create a backup plan and review it with each family. For families who are receiving in-person caregiver training, identify the plan for what to do if the family is unable to attend in-person training, whether due to illness or otherwise. To ensure continuity of care, consider creating a plan for in-person training to move to telehealth in the event that the caregiver or BCBA® are unable to attend in-person. Discuss this plan with the family, ensuring that it is a feasible plan for all involved. Similarly, create and review a

contingency plan for those who are receiving telehealth caregiver training. Consider what will occur in the event that access to the internet is not available and make plans for switching to in-person if possible. If moving to in-person training is not possible for the family or the provider, discuss the procedure for moving forward when telehealth barriers exist. If it is short-term, the solution will likely be to cancel that session and attempt to reschedule. Consider the most appropriate options on a case-by-case basis.

### Section 5 Personal Reflection

What ethical considerations do you make when planning for caregiver training? Are there particular considerations made for telehealth-based training?

### Section 5 Key Words

Ethics Code for Behavior Analysts - The ethical requirements set forth by the Behavior Analyst Certification Board (BACBⓇ) that all behavior analysts, assistant behavior analysts, and applicants must follow.

HIPAA-Compliant - Implementation of controls and safeguards to ensure that protected health information is kept confidential.

Informed consent - Signed documentation that outlines the scope of treatment, explaining both the potential risks and benefits of treatment. This is intended to provide adequate information to allow individuals to make an informed decision about whether or not to pursue this treatment.

## Section 6: Curriculum Use

While not required, many behavior analysts choose to use a structured caregiver training curriculum. Structure and preparation are important components of an effective caregiver training program. Caregivers of children with ASD are often balancing numerous expectations and free time is limited. To maximize the time available, create a solid structure for training sessions. Curriculums are great for taking some of the prep work off of the BCBAⓇ's plate. However, it is important to note that individualization is needed, so avoid getting into the mindset of proceeding through a curriculum, cover to cover.

There are a few caregiver training curriculums, specific to ABA, that are currently available. Behavior analysts should evaluate the uses of each in choosing a curriculum that would be of benefit to their client. One of the more well-known curriculums is the One Year ABA Parent Training Curriculum, created by Heather Gilmore, who is a BCBA®. This curriculum includes 26 lessons with research-based content. It also includes handouts, topic explorations, and homework for the caregivers to complete outside of therapy sessions. The lesson topics range from data collection and functions of behavior to developing communication and self-help skills.

Another curriculum many behavior analysts use is the Rubi Network's Parent Training for Disruptive Behavior. This curriculum consists of 11 core sessions, with more of a focus on reducing challenging behaviors. This curriculum includes a script for the behavior analyst to follow, handouts, activity sheets, and checklists.

There are a handful of other curriculums on the market for consideration. There are many factors to consider when deciding on a curriculum. These may include the following:

1. The caregiver's reported goals
2. The training goals identified by the BCBA®
3. The intensity of the training expectations, compared to the availability of the caregiver's time and resources
4. Financial and resource considerations

Regardless of which curriculum is used, it is vital that flexibility is maintained and lessons are individualized. Some curriculums provide a script, which could be read verbatim. However, that might come across as overly rote and robotic. Instead, it is best to use the curriculum as a guide and conduct training sessions in a more personalized manner.

## Section 6 Personal Reflection

Do you prefer using a curriculum in providing caregiver training? Consider why or why not. Which curriculum do you believe would provide you with the most benefit for your caseload?

### Section 6 Key Words

Caregiver training curriculum - Written guidelines for the progression of caregiver training, in a structured format.

## Section 7: Structuring Caregiver Sessions

Whether using a curriculum or not, it is important to have an outline or structure for the progression of caregiver training sessions. The format will vary depending on a number of factors including whether sessions are in person or virtual and what the primary focus of training is on. Each behavior analyst should create their own structure for what works best for them. Provided below is a general outline which may be revised as needed to meet individual needs.

**Check-in:** Spend a few minutes on rapport and discuss general information regarding the child and caregiver. Make note of anything new or unusual.

**Follow-Up:** Discuss the caregiver's and child's progress on treatment goals. If in the last session the caregiver was trained on extinction procedures, discuss how their implementation of extinction has been since that meeting. Provide additional training and guidance on any concepts as needed.

**Training:** Implement training on goal(s) as previously identified or those goals which may have developed during the check-in and/or follow-up stages.

**Confirm next steps:** Spend time toward the end of each meeting discussing what the next steps are. If "homework" is assigned, thoroughly review this with the caregiver. Confirm the next meeting date, time, and location.

### Section 7 Personal Reflection

How do you structure your caregiver sessions? What benefit does this structure create for your training?

# Section 8: Barriers

It is vital that behavior analysts continuously assess for barriers in treatment. This includes assessing for barriers to caregiver training. As previously discussed, this is one ethical requirement of BCBA®s. There are many potential impediments to treatment that behavior analysts should be aware of and address if and when they occur. If barriers are identified, it is the responsibility of the behavior analyst to address the barriers and make modifications.

## Availability and Cancellations

One common barrier to caregiver training is caregivers' availability to attend training. This may include cancellations of established training times. Many caregivers live busy lives between work, children, and other responsibilities. There are, however, several strategies for proactively addressing this barrier.

At the onset of services, the rendering BCBA® should clearly outline the scope of services, roles, and responsibilities of all parties involved. A client's caregiver should have a full understanding of what is expected of them, as far as caregiver involvement. This should be individualized to the caregiver based on a thorough assessment and treatment plan. When discussing this, assess for signs that the caregiver understands and accepts the terms before moving forward. During this time, the treatment plan would be reviewed, including the transition and discharge plans. While each provider may have varying requirements, perpetual failure to attend sessions, whether direct therapy or caregiver training, typically results in the discontinuation of services. This should be explained and outlined in the discharge plan. Proactively informing caregivers of the expectations for their involvement in treatment is an often effective antecedent strategy to reduce the likelihood of canceling training or refusing to schedule caregiver training.

There are several other strategies to address scheduling concerns for caregiver treatment guidance sessions. At the onset of services, identify shared availability between the BCBA® and the caregiver. Caregiver training does not have to be provided with the child present (per the 97156 CPT code), which may open up additional availability. First, assess if training without the child present is appropriate for that family. It is recommended to use a consistent day and time for training sessions, if at all possible (i.e., every Friday at 9 AM). This reduces the likelihood of the parent forgetting

the sessions, resulting in no-shows or cancellations. Sending out reminders, via HIPAA-compliant modes of communication, a day or two before the scheduled session may also be beneficial, especially for those families who do not have a lot of time to spare.

The use of telehealth for caregiver training may also reduce the likelihood of cancellations. If behavior analysts and caregivers are in agreement on providing caregiver training via telehealth, this may reduce scheduling conflicts, as the caregivers may attend the session from wherever they are located.

While telehealth is an appropriate option for many families, it is not a one size fits all approach. For some families, telehealth may result in increased cancellations due to a lack of resources, spotty internet connectivity, challenges with understanding technology, etc. As always, care should be individualized, including the use of telehealth.

## Failure to adhere to treatment recommendations

Another barrier in caregiver training is caregivers' failure to adhere to treatment recommendations. There are several potential explanations for caregivers not following through on the BCBA®'s recommendations. Caregivers of children with ASD and other additional needs often experience high levels of stress. This has been further compacted by the challenges in the last few years of the pandemic. In an article from early 2022, authors present emerging evidence supporting what is known as the "spillover hypothesis." This hypothesis suggested that the caregivers of children with ASD are experiencing high levels of stress and anxiety, most notably during the pandemic (Eshraghi et al., 2022). This stress and anxiety may then "spill over" to their children with ASD, which may lead to challenges such as a worsening of symptoms associated with ASD, more behavioral challenges, and decreased overall mental health (Eshraghi et al., 2022). Further research is necessary to better understand this phenomenon and identify strategies to address this cycle. However, this emphasizes the level of stress that caregivers of our clients often experience. Further, it highlights the need for behavior-analytic caregiver training to be a benefit and stress-reducer rather than just another added stressor (Eshraghi et al., 2022).

Caregivers are often balancing many therapies, meetings, extracurriculars, and other things for themselves and their child(ren). This should be taken into consideration when creating interventions and conducting training. Consider whether the information and material is valuable to the caregiver. If it is not, then caregivers may be less likely to adhere to treatment recommendations. Further consider whether the caregiver goals

are achievable, given their resources, availability, and experience. If goals are not individualized that take into consideration the caregiver's time, resources, expertise, and abilities, then caregivers may be less likely to adhere to recommendations (Eshraghi et al., 2022).

Establishing rapport with a client's caregiver is one of the most important factors in achieving "buy-in," which results in a higher likelihood of follow-through on treatment recommendations. Getting to know the client's caregiver, while maintaining professional boundaries, can go a long way in treatment efficacy. Through the development of rapport, one can demonstrate a genuine interest in what is most important to the caregiver, what cultural considerations may be at play, and how they can be of the most support to the family.

There are two main components to pairing, which are the same as when ABA professionals pair with clients. These include providing reinforcement and limiting demands. The first few caregiver training sessions should be focused on building rapport and getting to know the caregiver's expectations, interests, goals, etc. This time should not be used to immediately establish goals and start giving demands about what they should and should not be doing. Taking the time to establish rapport cannot be understated as a necessary and incredibly valuable component of a therapeutic process.

There are other problem-solving strategies for addressing a failure to adhere to treatment recommendations. The primary method would be to assess for interfering variables. Consider why the family is unable to conduct the goals as trained. Evaluate the barriers that exist. In this moment, behavior analysts should thoroughly self-assess their caregiver training procedures and identify wherein lies the challenge for the family. As with treatment specific to clients, treatment is individualized for caregivers as well. If the methods in which the BCBA® is providing care are not proving successful, the behavior analyst should make modifications. Consider whether the caregivers are being trained to competency and whether they are experiencing environmental barriers to implementing particular procedures.

When providing feedback to caregivers, be specific, informingthem of what they should do, rather than focusing on what not to do. Again, the principles of behavior are the same when working with caregivers.

Avoid passing judgment toward caregivers who are perceived as uncooperative. Rather, approach this in a compassionate and understanding manner. The expectations of

caregivers of children receiving ABA can be quite high. Most parents do not experience a professional coming into their home and telling them, essentially, how to parent.

BCBA®'s should be aware of their tone and demeanor. When professionals approach caregiver training as an expert-parent dynamic, they may inadvertently come off as condescending or rude. It is important to be mindful of the way one is communicating with caregivers.

The caregiver-professional relationship must be a collaborative one, rather than an expert-client dynamic. While the behavior analyst has valuable information to share with the caregiver, the caregiver also has incredibly valuable information regarding their child. They know their child best. A collaborative approach to caregiver training is needed for best possible outcomes. This format allows for an increased focus on rapport as well, which may lead to a higher likelihood of buy-in.

## Potential socioeconomic barriers

Families of lower socioeconomic status may experience additional challenges accessing and maintaining treatment, which may be heightened when treatment is being offered and provided virtually. Before proceeding with telehealth, behavior analysts must confirm that the family has the equipment and stable internet available to maintain virtual communication. If this is a barrier to receiving treatment for a family, behavior analysts may provide resources for the family to further explore to bridge the gap, in order to access effective care. One such resource is the Affordable Connectivity Program via the Federal Communications Commission (FCC) (Pollard et al., 2017).

For documentation that requires signatures such as consent forms, consider socioeconomic barriers in the manner of which these forms are provided. For example, a family who does not have access to a printer, may be unable to print and sign intake, consent forms, or any other documentation required to proceed with training. Consider alternative manners of signing documentation such as mailing the documentation with a self-addressed envelope and stamp.

Online signing platforms such as Docusign may be an option, if the family has reliable access to email and the internet (Pollard et al., 2017).

A therapeutic materials inventory should be conducted to identify the family's in-home resources. In the event that the family does not have access to resources required, based on the identified needs of the family, behavior analysts should make reasonable

efforts to provide resources for the family to access needed materials (Pollard et al., 2017).

The following checklist can be used to evaluate whether a family has the available resources in order to proceed with telehealth caregiver training.

1. An electronic device such as a tablet, computer, or smartphone with working video capabilities.
2. A charger to keep the device charged.
3. Reliable and consistent internet access.
4. Access to a HIPAA-compliant video communications platform.
5. A designated area free of distractions
6. Materials and reinforcers, as needed depending on whether the child will be present and participate during caregiver training.

## BCBA®s Lack of Training or Expertise

Barriers may also relate to the behavior analyst providing the training. Caregiver training, whether via telehealth or in-person, should not simply be "check-ins" to see how therapy is going for the child and caregivers. Instead, these trainings need to focus on the development, generalization, and maintenance of the caregiver's skills. When the BCBA® is lacking in training within this area, the client and caregiver may suffer through ineffective and insignificant training. It is essential that behavior analysts seek out training and support in the areas of caregiver need. Organizations should implement clinician training and quality assurance processes to ensure behavior analysts have the necessary prerequisite skills and knowledge to run effective treatment guidance sessions. This is particularly true for behavior analysts who are offering telehealth-based caregiver training, as that brings an entirely separate set of competencies, such as technological set up and providing functionally-equivalent support without being physically present with the caregivers.

## Section 8 Personal Reflection

What steps do you take in problem solving barriers to caregiver goal progression?

## Section 9: Monitoring effectiveness

Behavior analysts are responsible for ongoing progress monitoring of their clients and caregivers. When evaluating the level of effectiveness, BCBA®s should consider multiple factors:

1. The caregiver's skill acquisition rate. Is the caregiver making steady and sufficient progress in skill acquisition? There are many concepts and skills that caregivers may be trained on through caregiver training. While everyone's acquisition rate is different, they should be demonstrating steady progress toward the pre-established mastery criteria.

2. The client's skill acquisition rate. Is caregiver training resulting in best possible outcomes for the child's skill acquisition? Are they progressing across domains? Has caregiver training resulted in any barriers to skill acquisition? The client's ability to progress within their highest priority skill areas is an important consideration in monitoring treatment effectiveness.

3. The client's levels of target behavior. If the client has a BIP in place to address challenging behavior, such as aggression or self-injurious behavior, then caregiver training should consist of training the caregivers to implement the plan outside of sessions or a variation of the plan, as designed by the behavior analyst. When all parties are on board with behavior-change procedures, consistent progress toward the targeted behavior reduction goal and an increase in functionally-equivalent replacement behaviors are likely to be evident. If there is minimal change in targeted behaviors, the effectiveness of the caregiver training program should be considered and further evaluated. Identify barriers and troubleshoot resolutions.

4. The effects on the family unit. Is caregiver training more helpful than it is interfering? Our client's caregivers are often quite busy and overwhelmed with all they have to juggle. The goal of a BCBA® is to reduce the family's stress by teaching them adaptive strategies. Evaluate whether the effects on the family are generally positive or negative. This would typically be done via an open-ended interview with the caregiver. If the caregiver training is resulting in increased stress or other negative effects on the family, the behavior analyst should troubleshoot barriers. If caregiver training is currently being provided via telehealth, consider whether in-person training would be more beneficial.

Alternatively, if caregivers are currently accessing training in-person, evaluate whether telehealth would result in any change or improvement in their current situation.

In monitoring the effectiveness of caregiver training, behavior analysts should identify whether to continue with procedures as is or if making modifications is necessary. If barriers to treatment exist, modifications must be made. See section 8 on barriers to treatment.

## Section 9 Personal Reflection

What assists you in determining the progress that the caregiver(s) are making through caregiver training?

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