

# **FAMILY MODULE THREE: SUGGESTIONS FOR BEHAVIORAL PROGRAMMING**

*Developed by the Indiana Resource Center for Autism  
Indiana Institute on Disability and Community  
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Children with autism spectrum disorders (e.g., autism, Asperger's syndrome, pervasive developmental disorders) who engage in challenging behaviors place a tremendous stress on the family members and professionals who support them. This stress may be unduly increased when those involved with the individual lack training or knowledge of the strategies for assessing, understanding and addressing problem behaviors. The purpose of this module is to provide some basic information about functional behavioral assessment approaches, and various strategies/methods for addressing challenging behaviors. The hope is to present information that can be easily used to ensure long term behavioral change.

## ***I. ROLE OF CRISIS MANAGEMENT***

Let's begin by talking about crisis management. When an individual engages in a behavior that threatens the safety of themselves or of others, family members and professionals want to know how to implement immediate behavior change. The question is typically framed as, "What do we do when....?" The goal in asking this question is to find an approach that will have an immediate impact in a difficult or crisis situation. In reality, those who ask only this question will merely find a short term solution. This response is referred to as crisis management. The goal of a crisis management plan is to diffuse or interrupt a potentially dangerous situation. The limitation of crisis management is that it is a quick fix with no long term educational benefit. In other words, the individual does not learn an alternative prosocial response.

The other danger in using a crisis management approach is that our response may actually strengthen the behavior. If we restrain a child who loves deep pressure, we may actually reinforce their negative behavior. If we place a child in time out who prefers to spend time alone, we may be providing them with a vacation from the stresses of the situation. And if we respond emotionally to a problematic situation, the child may enjoy the attention and excitement their behavior elicits. Remember that we continually run the risk of reinforcing behavior through our actions.

When an individual is in the midst of a behavior, this is not the time to lecture or teach. Again, the goal is to minimize the situation. When an individual is most upset, they have less capacity to learn. Lecturing or talking to them may only serve to intensify the behavior. Instead, keep your words to a minimum and always respond with a neutral affect. Remember the goal is not to have the “last word” or to make your point heard, the goal is to keep everyone safe.

Likewise, at times punishment and exclusion are considered as means to control behavioral situations. Both of these have limitations. First, we all know children who would prefer to spend time alone. Being sent to their room is not punishment to many of these children. What started as a strategy to punish or make a point, has now become a reward for the child.

Punishment has limitations in that children do not learn appropriate behaviors by being told “no” or by losing privileges. These strategies may only work in the presence of someone who physically intimidates the person or who has the stature to control. This type of control does not create a relationship of trust conducive to maximum learning. Ultimately remember that we are serving as continual role models for children. Resorting to punitive approaches as the primary means of behavior change does not teach children how to respond in a more proactive fashion in the future.

Despite of all these issues, there is a role for crisis management plans. Individuals can not be allowed to harm themselves or others. However, the critical word is plan. Each person involved with the individual must know how to respond with the goal of minimizing the situation. After an event occurs, family members should talk about how well the plan worked and what should happen next time. And when the individual is not in crisis, then the real work of behavior change can occur.

## **II. IDENTIFYING FUNCTIONS OF BEHAVIOR**

An important first step when initiating a program for behavioral change is to define in measurable and observable terms the behavior you wish to change. For example, just saying a child is aggressive or non-compliant is not enough. What does the aggression look like? In other words, is the child kicking, hitting, pinching, or biting when the aggression occurs. The behavior has to be identified in measurable and observable terms so that all can be clear when it is or is not happening. This makes our response less subjective. Below are examples of good and poor descriptors of behavior.

<b><i>Poor Descriptors</i></b>	<b><i>Good Descriptors</i></b>
Aggressive	Pushes others off the swing in the backyard.

Destructive	Throws food when required to sit at the table.
Non-Compliant	Does not stop running when told to stop.

Once the behavior is determined, then we can begin to identify the function or purpose of the behavior. The underlying cause of the behavior must be identified in order to develop a plan that will effectively address the behavior. In schools this is referred to as conducting a functional behavioral assessment. In schools, a functional behavioral assessment (FBA) should be conducted whenever a student's behavior interferes with their learning and the learning of others, and/or when the individual has a history of problem behavior. However, this a process of trying to identify the underlying causes of behavior should always occur before a plan is developed.

Often times, those assessing behavior will simply look at the *ABC's of Behavior*. *ABC refers to:*

- **A**ntecedent- the events, action, or circumstances that occur before a behavior.
- **B**ehavior- The behavior.
- **C**onsequences- The action or response that follows the behavior.

The following is an example of ABC data collection. From this data, we can see that when Joe is asked to end an activity he is enjoying (we know that he enjoys playing computer games), he screams, refuses to leave and ignores. We also can see that the response to Joe's refusal consists mostly of empty threats. If we follow Joe throughout the day, we may find that he is asked repeatedly to follow directions. In addition, the data reveal that Joe's family uses threats that are not followed through on. Joe has learned that persistence, ignoring and refusal will wear parents down.

Antecedent	Behavior	Consequence
Parent asks Joe to stop playing on the computer.	Joe screams, "NO!" and refuses to leave the computer.	Parent tells Joe to leave the computer again.
Parent tells Joe to leave the computer.	Joe again refuses to leave.	Parent starts counting to 10 as a warning to get off the computer.
Parent starts counting to 10 as a warning to get off the computer.	Joe does not move from the computer station.	Parent finishes counting to 10 and again warns him to get off the computer.
Parent finishes counting	Joe stays at the	Parent threatens that

to 10 and again warns him to get off the computer.	computer and refuses to leave.	Joe will lose computer privileges in the future.
Parent threatens that the Joe will lose computer privileges in the future.	Joe ignores and continues working on the computer.	The parent count to 10 again and again threatens future computer use.
The parent counts to 10 again and again threatens future computer use	Joe ignores and continues computer use.	The parent becomes angry and leaves the room.

While this is important information, it is necessary to look beyond the immediate environment to identify other factors that may be triggering behaviors. These other factors are referred to as Setting Events. Setting Events are conditions that predispose the individual to engaging in a problem situation. For example, if a child has a bad bus ride home, is tired and is not feeling well, he/she may engage in problematic behaviors upon arriving home when requested to do a simple task. On a day when the bus ride is smooth, the child is rested, and he/she is feeling well, you may make the same demand and this time the child will respond perfectly. The Setting Events of the bus ride, being tired, and not feeling well have increased the chances that problem behavior may occur. Other Setting Events include sensory challenges, medication changes, staff changes, schedule changes, and holidays. A major Setting Event is skill deficits. Obviously if the setting event is a skill deficit, a major aspect of behavioral programming is focused on teaching an alternative skill. For example, in the ABC example above, Joe may not have other activities that he knows how to do and that he enjoys. Our job would then become one of expanding his social repertoire. Below are examples of Setting Events:

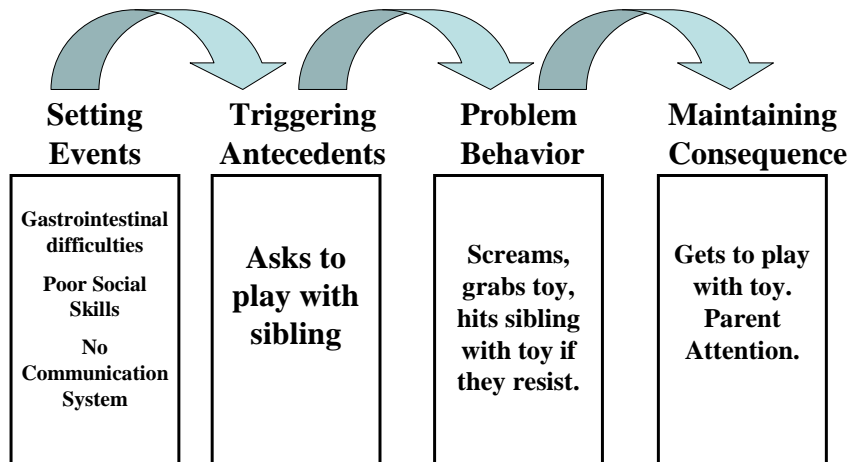
Example 1: Danny's parents go out of town for a wedding and his grandparents come over to watch the children for the weekend (setting event). Danny is anxious and does not sleep well (another setting event). When he arrives at school a child accidentally knocks into Danny (antecedent) and Danny then pushes his classmate to the ground (target behavior).

Example 2: Johnny starts a new medication to help reduce aggressive behaviors (setting event). This medication increases his appetite. At home, Johnny begins grabbing his sibling's food during dinner and eating it (target behavior).

Example 3: Kyle is on a gluten/casein free diet (setting event). His parents have noted that he has been chewing on cardboard books that contain gluten in the binding glue and has been eating other non-edible items (target behavior).

Once information has been gathered, a problem behavior pathway or Hypothesis Statement can be developed that outlines setting events, triggering antecedents, problem behavior, and maintaining consequences. The case study below provides an example

## Hypothesis Statement (Problem Behavior Pathway)



Typically behavior support plans focus on antecedents and consequences. A typical reaction may be to consider how to make the consequences more aversive to stop the behavior from occurring. However in this diagram, it becomes apparent that a social skills deficit and the lack of a communication system are contributing to the problem behavior. Until these issues are addressed, only focusing on consequences will not result in appropriate behaviors. So, the focus of programming should be on building a communication that is useful, on teaching the child both how to play with his sibling, and on addressing the gastrointestinal difficulties.

After gathering information, a behavioral function is also determined. The function of behavior refers to the “why” of a behavior. That is, why is a behavior occurring or what function does it serve? Behaviors typically have one of the FOUR following functions:

### 1. Attention

Example: After data was collected, it was determined that when parents are busy (antecedent), Danny screams (target behavior). When Danny screams, the parent gives attention to Danny by telling Danny to stop screaming

(consequence). Therefore, in this case the behavior of screaming serves the function of attention-seeking.

## 2. Escape/Avoidance

Example: ABC data and parent interviews reveal that when the noise-level in the home rises (antecedent), Cody crawls under the table (target behavior), and often times he is allowed to remain under the table for several minutes (consequence). Here, the behavior of hiding under the table serves the function of escaping an environment that is over-stimulating for Cody.

## 3. Tangible Reward

Example: Jim's mother reports that Jim hits his siblings (target behavior). This behavior occurs when his brothers play with his dinosaurs, which are Jim's favorite toys (antecedent). Jim hits the siblings who are playing with the dinosaurs, and the brothers then give up the dinosaurs to Jim (consequence). In this case, the behavior of hitting, serves the function of giving him access to the desired object.

## 4. Sensory Issues

Example: Bobby sometimes takes off his shirt and pants at home (target behavior) and refuses to put them back on. It was determined that this happens only when he wears clothes made out of synthetic materials (antecedent). His parents often engage in a physical struggle to get Bobby to put his shirt back on, which he usually just takes off again (consequence). It appears that Bobby has a sensory sensitivity to certain fabrics.

Once a behavior has been defined, data collected, and the behavioral function determined, an intervention plan is created and strategies adopted to both decrease the problem behavior and to teach alternative ways of responding. The following behavioral principles are often employed based on the function of the behavior.

### ***III. Positive Behavior Support Approaches***

Positive behavior support approaches focus on creating positive environments, and teaching children alternative ways of behaving. It is important to remember that some children may not be able to generate behavioral options which have the same effect as the problem behavior. For others, behaviors perceived as challenging by family members may be appropriate or necessary for the child's coping across settings. Our job is to expand their repertoire of acceptable options by teaching alternative behaviors.

Skills such as interacting with siblings, waiting, having a conversation in a mannerly fashion, taking turns, standing at a distance from the speaker to respect personal space, and responding to adults in a positive fashion may have to be taught. When choosing an alternative behavior, professionals and family members must make decisions by considering the total person. Identify skills needed for school, home, and other community activities by gathering information through the functional behavioral assessment process, and from conversation with professionals and sometimes the individual him/herself. Remember that if an appropriate alternative behavior that accomplishes the individual's purposes is not taught, the individual may find a replacement behavior that is less desirable than the initial behavior. Teaching alternative skills will require more effort on the part of all involved, but the beneficial outcomes will be longer lasting.

The technology of applied behavior analysis is always utilized within the positive behavior support framework. ABA includes various strategies for teaching alternative behaviors and for decreasing problematic behaviors. The term applied behavioral analysis (ABA) refers to a systematic and scientific approach to understanding and improving behavior. It provides a means of tracking, predicting and changing human behavior. Various principles are associated with applied behavioral analysis. Below are just a few of these.

**Reinforcement:** Something is considered a reinforcer because it results in an increase in behavior. For example, Joey urinates in the toilet more each day because it gets him access to his favorite video. Or this can include a token economy such as Bill receives a star every time he picks up his toys. After he receives five stars, he gets a special privilege such as going to the park. Natural reinforcers typically produce the best results. Natural reinforcers are those that are directly related to the task. For example, Scott says, "ball" and is given the ball and not a piece of candy for using the word "ball."

**Differential Reinforcement:** There are various versions of differential reinforcement, but generally it is used to increase the occurrence of a desired behavior while decreasing the frequency of the target behavior. It involves the use of reinforcement and extinction (described below). Below are examples of various differential reinforcement schedules:

- Differential Reinforcement of Other Behavior (DRO). The delivery of reinforcement is contingent upon the absence of the problem behavior for a specified time period.

Example: Mary is reinforced for not grinding her teeth during a three minute time period. At the same time, the teeth grinding is ignored when it occurs.

- Differential Reinforcement of Alternative Behavior (DRA). The person is reinforced for a behavior that serves the same function or purpose as the target behavior.

Example: Susan is reinforced for asking her sister for a crayon instead of simply grabbing it from her sibling.

- Differential Reinforcement of Incompatible Behavior: A behavior is reinforced that is functionally similar and is incompatible or competes with the target behavior. This behavior prevents the target behavior from occurring.

Example: Jared is reinforced for pinching play-doh instead of the adult sitting next to him.

**Reinforcement Schedules:** There are basically three reinforcement schedules. These determine how often the child is reinforced.

Continuous: Reinforcement is delivered after every response. This is used mostly when a person is learning a new behavior. For example, every time Jamal successfully puts his toys away he is reinforced with a high-five.

Variable (Intermittent): Not reinforcing every response. This type of schedule is used for maintenance when a person has already acquired the behavior. There are two types of variable reinforcement:

Interval: Providing reinforcement for the first targeted response that occurs after a fixed or variable time period has passed.

Example: Jamal is reinforced the first time he eats with his spoon correctly after a five minute (fixed) period has passed.

Ratio: Reinforcement is delivered after a fixed or average number of responses.

Example: Jamal is reinforced the sixth time (proceeding five other successful attempts) he eats correctly with a spoon.

**Extinction:** When a behavior that has been previously reinforced (whether we meant to or not), no longer produces reinforcing consequence (e.g., we ignore it) this results in a decrease in the occurrence of the behavior in the future. This procedure usually produces a *response/extinction burst* where the behavior gets worse before it gets better because the person “ups the ante” to try to get access to the reinforcer. This is never used for behaviors that are harmful to self or others. You can not ignore a person hurting themselves or others.

Example: Jesse likes to talk in a cartoon-like voice to gain the attention (even negative attention) of others. This behavior is ignored by others, thus removing the reinforcing attention. As a result, Jesse eventually stops talking in the cartoon voice. Remember that Jesse will initially increase the use of his cartoon-like voice in an attempt to gain attention. If he is reinforced at any point, then the behavior is strengthened and will become harder to extinguish.

**Premack Principle** (Grandma's rule): This is similar to "first you eat your peas, then you can have desert." You reinforce a lower frequency behavior with one that occurs at a higher frequency. This contingency is expressed prior to the occurrence of the target behavior not after! It is not a bargaining tool or to be used for bribery.

Example: Alex is told that first he must complete his math worksheet and then he can play with his Game Boy.

### ***Proactive Strategies***

Again, a great way to deal with problem behaviors is to take steps to ensure that they do not occur in the first place. More time should be spent on prevention efforts than on reactive efforts. Below are a few examples.

**Skill Building:** Often times problem behaviors are the result of skill deficits. When thinking about a target behavior for change, consider what you would like your child to do instead and what would be socially beneficial and appropriate.

Example 1: A child who pulls hair to get the attention of others could be taught to tap on the shoulder or call the person's name instead.

Example 2: An individual who has trouble interacting in social situations and consequently avoids contact with others is taught specific ways to initiate social exchanges with peers.

**Augmentative Communication:** Individuals on the autism spectrum often need communicative support. Problematic behavior can occur when an individual does not have the proper tools to communicate. Providing a means of communicating that is appropriate for the individual can go a long way in reducing problem behaviors.

Example: Jeri is nonverbal and becomes frustrated (screams, cries, falls to the floor) when she tries to communicate that she wants something. The speech-language pathologist teaches Jeri to point to a picture representing the object she is requesting.

**Environmental Manipulation:** Changes can be made to the individual's environment that can reduce problem behaviors. Examples are as follows:

Example 1: Using the example of a sensory challenge, a simple solution would be to only buy cotton shirts for Bobby.

Example 2: Providing a visual schedule so that a child with ASD can predict what is happening throughout the day and is alerted of changes.

Example 3: A child with autism can have a clearly delineated place in the house where he can relax, and another clearly delineated place where he is expected to study.

Example 4: A child with autism can have an area in the house that has been identified as a place to go and regroup. This is a safe place where he can not be bothered by others.

**Setting Limits:** For most of us, it can be difficult to end an activity we are really enjoying. This can be even more challenging for individuals on the spectrum. As such, it can be helpful to set limits in terms of time or number of acts until it is time to stop. Limits should be enforced consistently across time, place, and persons. They should be communicated clearly to the child, and families should reach consensus in order to not sabotage each other's efforts.

Example 1: A student is told they can spend 5 more minutes on the computer and then it is time to turn it off.

Example 2: A child is allowed to blow 4 more bubbles before it is time to put them away.

Finally, there are various treatment approaches that focus on behavior. Some of these include discrete trial training, pivotal response training (PRT), and verbal behavior training. Even within strategies the exact procedures used can change depending on the professional utilizing the approach. The Indiana Resource Center for Autism website has videos and books that further explain these procedures. And realize that if behavior is too intense or clarity is needed, outside support may be helpful.

**Now let's think about your child:**

**1. What behavior(s) are most challenging to your child and/or to your family? Remember to write this in observable terms.**

**2. What potential antecedents do you see contributing to this behavior?**

**3. Under what conditions does your child do their best?**

**4. Under what conditions is your child most challenged?**

**5. What would you like your child to learn to do differently? What is the alternative skill you hope they will learn?**

**6. When you are in the midst of a crisis situation, how do you and other family members respond?**

**7. How could you and other respond differently?**

**8. What are your ideas for things that you and your family can do differently?**

**For more information about the Indiana Resource Center for Autism, visit our website at [www.iidc.indiana.edu/irca](http://www.iidc.indiana.edu/irca) or email Dr. Cathy Pratt at [prattc@indiana.edu](mailto:prattc@indiana.edu).**

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- ◆ Early intervention and education;
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- ◆ Autism spectrum disorders;
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- ◆ Planning and policy studies; and
- ◆ Individual and family perspectives.

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