Overview of Functional Behavior Assessment

In this chapter, we will learn the following:

- How tiny events can set a behavior to recur in the future
- Parable about the function of behavior and why some behaviors continue to show up at the side of our boat
- What a behavioral intervention plan written without a functional behavior assessment looks like
- What a functional behavior assessment should really tell us

In mathematics, chaos theory illustrates the behavior of certain forceful systems, meaning systems whose states evolve with time revealing dynamics that are highly sensitive to initial conditions. Most people know this as the butterfly effect. If you are familiar with chaos theory, then you know the story: The flap of a butterfly wings in Brazil causes a tornado in Texas . . . or the flap of a butterfly wings in Texas causes a tsunami in Asia. Chaos theory has a lot to do with behavior change.

Tiny changes in the environment can have huge ripple effects toward the future. Our job as behavior change agents is to determine what set the behavior in motion. Here are just a few examples: (1) Jay, an adult with autism, bipolar condition, intellectual disabilities, and obsessive-compulsive disorder, was brought to his new home. He came in one door, went up one set of stairs, across the top floor, and down a second set of stairs. From that
point forward, Jay would only go up the first set of stairs and only go down the second set of stairs. The behavior pattern was set in one visit to the house. (2) Grace, a typically developing two-year-old girl, began whining for a toy in a discount store. Her mother refused her pleas and began walking toward another department. Grace threw herself on the floor and began kicking around and screaming at her mother and saying, “You never buy me anything.” Grace’s mother, embarrassed beyond words, picked up the original toy and said, “Will you stop crying if I get this for you?” The tantrum behavior was set into motion for all future desires at the discount store. It can be as tiny as a flap of a butterfly wings or as large as a child’s wild legs in motion that set a behavior pattern into the future.

This book will focus on using the systemic supports in positive behavioral interventions and supports (PBIS) at the tertiary level. PBIS is as much a way of thinking about students and the scaffolding of their support as it is an intervention approach (Bambara, Dunlap, & Schwartz, 2004). As in PBIS, the systemic supports for tertiary-level support focus on measurable outcomes. How do we know where we have been if we do not know where we started? This book is a resource for behavior support teams (BST) and educators to gain the valuable information of where we started in the process of changing behavior.

BSTs should consist of (1) an administrative designee, (2) a behavior expert, (3) representative samples of school staff, (4) adults who work or live with the student, and (5) the student, if appropriate (Crone & Horner, 2003). This wide range of people work as a team to determine hypotheses about the function of the behavior, analyze data from observations, implement an intervention plan based on the perceived function, and analyze the results of that intervention. Every school should use a BST as part of a secondary and tertiary-level support system for all students in the school.

Our job as behavior change agents is to determine what set the behavior in motion in the first place, so we can set an equal and opposite action in place to counterbalance the previous learning. Bandura (1976) tells us that all behavior is learned, and therefore, a replacement behavior can be put in motion if we know the function behind the behavior. I always like to tell a story about function of behavior to begin.

The Fisherman

An elderly gentleman was enjoying the peace and solitude of being on the lake, alone with his thoughts. While fishing in the middle of the lake, he spied a snake swimming by his boat. He noticed the snake had a frog in his mouth, and the fisherman knew the fate of the poor frog. The fisherman, seeing the frog’s fearful wide eyes, knew he had to do something, so he leaned over the side of the boat, gently released the frog, and the frog swam happily away. However, the fisherman looked at the snake that was now looking forlorn. He had just taken away the snake’s meal. He had to
offer him something to eat. He scrounged around the bottom of the boat, and that big Subway sandwich he had brought was gone, not even a shred of lettuce to share. Those warm chocolate chip cookies were gone too, not even a chocolate chip lying on the bottom of the boat. The sad empty sack of potato chips was staring up at him. He had nothing to offer the snake, except a bottle of whiskey. He opened the whiskey and offered the snake a sip or two. The snake greedily slurped up the whiskey and then swam rather crookedly away. The fisherman went back to fishing, and just as he was enjoying the peace and solitude of the sun setting on the lake, all of a sudden, on the side of his boat, he heard, *bam, bam, bam*. He looked over the side of the boat, and the snake was back with three friends, each holding a frog in his mouth.

The moral of the story is sometimes we provide better frogs. Children show up at the side of our boat with certain behaviors hoping for certain payoffs. Unfortunately, sometimes we provide even better payoffs than the child’s original intent. Here’s another example.

We ran a clinic for children with autism in a southeastern state. An eleven-year-old male was brought for evaluation. His mother had lost her job because of his behaviors at school. The school called the mother every single day to come get him because they could not handle him. While unemployed, she was taking him to the hospital for evaluation, and he disengaged his child-lock safety system in the back seat and engaged in a rage tantrum in the back seat. Before the mother could reach the side of the road, the young man had kicked the van door loose from the bottom of the door frame. The mother had to call the police to help contain him and escort him to the hospital. After a fact-finding mission, it became apparent that the school had taught the child that four hours of tantrums and biting someone equaled going home for the rest of the day. We brought the child to our clinic and prepared for the behaviors. We told the mother to find a new job because we would never call her to come get her child during the day, barring an emergency. We also padded ourselves, so if he bit us, we would not react. We were going to help this child unlearn his previous information.

He came to school and had a four-hour tantrum, and we did not send him home. He bit us, and we did not react or send him home. He tried having five-, six-, and seven-hour tantrums. No tantrum behavior equaled going home for this young man. It took him a few weeks to unlearn the behavior, but once he figured out that biting and tantrums did not equal a free trip home, he stopped. We were able to teach him and make up for lost learning. Within 11 months, we were able to move him to his home school where he began doing all the same work as the children on the moderate level, even though he had done no work at his previous school. He had to unlearn before he could learn. We will hear more about this young man in Chapter 13.

A functional behavior assessment (FBA) is a comprehensive, individualized method of analysis for identifying the motive or function of a student’s target behavior(s) to develop and implement a plan to modulate the
variables sustaining the target behavior and to teach appropriate replacement behaviors using positive interventions.

There is no one way to conduct a FBA. Each child, setting, and adult involvement is different; therefore, each FBA should be based on the specific needs of the situation. We have used a year’s worth of antecedent, behavior, consequence (ABC) data along with anecdotal notes to determine the function of one adult’s behavior. For another, we were able to sit in a classroom for 30 minutes using a data-collection tool that measured the student’s behavior frequency and duration and paired those results with investigative work to determine the function of the behavior. Both of these cases will be discussed in Chapter 13.

The tools needed to conduct the FBA vary with the intensity of the behavior, the number of months or years the behavior has been in place, and the contextual fit of the adults intervening on the child’s behalf. Chapter 3 will discuss indirect methods of collecting data for FBAs. These include surveys, anecdotal notes, interviews, and questionnaires. Chapter 4 will discuss direct methods that typically involve direct observation of the child in the natural setting. The problem is, most school districts engage in investing in just one type of FBA.

As behavioral specialists, we are frequently asked to view behavioral intervention plans (BIP) based on supposed FBAs. Many schools believe that all students’ behavior can be determined by answering 16 questions on a survey. Sometimes, this works; however, for severe and complicated cases, it takes much more than answering 16 questions.

Figure 1.1 is a BIP that was received via e-mail. All identifying information has been redacted. This is one of the finest examples of a nonexemplar. The team may as well have written, “The child will be good.” First, we will point out what is wrong with the BIP, and then discuss what characteristics should be included in a quality BIP.

Here are some ideas about what is wrong with this BIP.

**TARGET BEHAVIORS**

The target behaviors should be measurable and observable:

- The student fails to make decisions or come to a conclusion regarding choices.
  - This is open for interpretation by anyone collecting the data.
  - How long do they wait for the child to make decisions? Some children need more processing time.
- The student becomes physically aggressive with teachers.
  - This too is open for interpretation.
  - Is throwing a book on the floor physically aggressive?
  - Is swinging at an adult with a fist but not making contact physically aggressive?
<table>
<thead>
<tr>
<th>ABC PUBLIC SCHOOLS</th>
<th>BEHAVIOR INTERVENTION PLAN—Nonexemplar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Name:</strong></td>
<td>Taylor B. Goode</td>
</tr>
<tr>
<td><strong>DOB:</strong> 11/22/90</td>
<td><strong>School:</strong> ABC Public High School</td>
</tr>
<tr>
<td><strong>Student ID Number:</strong> 0000700007</td>
<td><strong>Grade:</strong> Junior</td>
</tr>
<tr>
<td><strong>Disability:</strong> Traumatic Brain Injury</td>
<td><strong>IEP Start Date:</strong> 11/01/07</td>
</tr>
<tr>
<td><strong>IEP End Date:</strong> 10/31/08</td>
<td></td>
</tr>
</tbody>
</table>

**Target Behavior:** What behavior(s) adversely affect the student’s learning?

**Desired Behavior:** Describe acceptable or appropriate behavior.

**Replacement Behavior:** What will be taught to replace target behaviors?

**Interventions:** What will be done to prevent the target behavior from recurring?

**Positive Consequences:** What will be done when the student uses correct replacement behaviors?

**Negative Consequences:** What will be done with the student when the target behavior recurs?

<table>
<thead>
<tr>
<th>Target Behavior</th>
<th>Desired Behavior</th>
<th>Replacement Behavior</th>
<th>Interventions</th>
<th>Positive Consequence</th>
<th>Negative Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student fails to make decisions or come to a conclusion regarding choices.</td>
<td>The student will make positive decisions without causing harm to herself or others.</td>
<td>The teacher/para will help child to follow directions without causing harm to others.</td>
<td>The teacher/para will reinforce the student for making positive choices. Teacher will speak with child to explain what she has done wrong; allow her to go to lunch early.</td>
<td>Praise, classroom privileges, free time, note home.</td>
<td>Remove from situation, call home, loss of free time. Parents should not reward negative behavior.</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Target Behavior</th>
<th>Desired Behavior</th>
<th>Replacement Behavior</th>
<th>Interventions</th>
<th>Positive Consequence</th>
<th>Negative Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student becomes physically aggressive with teachers.</td>
<td>The student will control anger to the extent of not requiring to be physically restrained.</td>
<td>The teacher/para will show child how to express feelings verbally rather than physically.</td>
<td>The teacher/para will remind child of coping skills, provide a quiet place, remove from situation, deliver direction in a supportive manner, and intervene early.</td>
<td>Praise, classroom privileges, free time, note home.</td>
<td>Remove from situation, call home, loss of free time, shortened schedule, and alternative placement.</td>
</tr>
<tr>
<td>The student does not demonstrate ability to control temper.</td>
<td>The student will demonstrate appropriate behavior when angry or upset.</td>
<td>The teacher/para will remind the student of coping skills and to use a voice that is controlled and quiet. The student will be reminded to refrain from arguing.</td>
<td>The teacher/para will provide positive feedback, provide a quiet place, and maintain consistent expectations.</td>
<td>Praise, classroom privileges, free time, note home.</td>
<td>Remove from situation, call home, loss of free time, shortened schedule, and alternative placement.</td>
</tr>
</tbody>
</table>

BIP monitored by: 

Date IEP team to review success of plan: 10/31/08
We sat in on a court case for a young man with Down syndrome who lived in a residential center. He was threatened with a paddling. He backed himself into a corner and held up a chair for protection. The residential center had him arrested for assault. He never threw the chair; he just held it up.

- Are there adults who bait the child into these behaviors?
- The student does not demonstrate ability to control temper.
- We have worked with schools where rolling of eyes was an instant trip to the office. How are we defining this for this young lady?

**DESIRED BEHAVIORS**

The desired behavior should be measurable and observable.

- The student will make positive decisions without causing harm to herself or others.
  - Did we teach the child what a positive choice was, or do we assume the child knows these choices?
- The student will control anger to the extent of not requiring to be physically restrained.
  - Is this child causing harm to self or others? Our opinion of when a restraint is needed is if the child is in impending danger like (1) an oncoming speeding car, (2) an oncoming speeding train, or (3) an oncoming speeding bullet. Otherwise, refrain from using restraint.

We once witnessed three grown men lying on a 15-year-old young man with emotional behavior disorders. One of the men weighed at least 250 pounds. When asked why they were lying on him (they preferred the term *restraining*), they replied that he spit on the floor and refused to clean it up. The young man repeatedly stated that he could not breathe.

- The student will demonstrate appropriate behavior when angry or upset.
  - All of these are “wishes,” which are fine if the team has a plan for how to teach the student replacement behaviors that will result in these desired behaviors.
  - The saying “You can lead a horse to water, but you can’t make him drink” applies to this situation.

**REPLACEMENT BEHAVIORS**

Replacement behaviors should give specific actions.

- The teacher/para will help child to follow directions without causing harm to others.
The teacher/para won’t cause harm to other children?

- Exactly how are they going to do this? It is open for interpretation, and when the BIP is not specific, it usually ends up staying locked in a file cabinet, and the staff will keep doing what they have always done. And then, we wonder why the student is not performing any better.

- The teacher/para will show child how to express feelings verbally rather than physically.
  - Through role-play, PowerPoint relationship narratives, video modeling? How are they going to show the child?
  - If we fail to plan, we plan to fail.

- The teacher/para will remind the student of coping skills and to use a voice that is controlled and quiet. The student will be reminded to refrain from arguing.
  - Will we do this proactively or reactively?
  - If we do not set it up in the beginning for what this will look like, the staff will wait for the child to engage in the targeted behavior and then react with a reprimand, which will continue the cycle.

### INTERVENTIONS

- The teacher/para will reinforce student for making positive choices. Teacher will speak with child to explain what she has done wrong, and allow her to go to lunch early.
  - The way this is written the child is rewarded for displaying targeted behavior (explain what she has done wrong, and allow her to go to lunch early).
  - If they had to have a BST meeting to come up with this intervention, then we might wonder what they were doing before this intervention plan.

- The teacher/para will remind child of coping skills, provide a quiet place, remove from situation, deliver direction in a supportive manner, and intervene early.
  - Once again, the BIP does not define how this will be done. If it is not written, it will not be done any differently than prior to the BST meeting.

- The teacher/para will provide positive feedback, provide quiet place, and maintain consistent expectations.
  - Positive feedback, “Atta girl!”
  - Positive feedback needs to label appropriate behavior. For example, “I like the way you showed respect by letting the younger children pass by in the hallway to follow their class.”
POSITIVE AND NEGATIVE REINFORCEMENT

Positive and negative reinforcement should contain specific directions.

- This example of an inappropriate BIP does not delineate any adult behaviors that sound any different from what the team was doing prior to the BST meeting.
- There are no lines of defense. In other words, the first line of defense should be one thing, and if that does not work, then specific instructions for the second step to tweak the intervention should be included in this BIP.

What this BIP failed to do was address any of the functions of the behaviors. Is the child engaging in target behavior to obtain adult attention or to escape from nonpreferred tasks? Behavior is learned and serves a specific purpose. Figure 1.2 illustrates the two possible functions of behavior.

Figure 1.2 Functions of Behavior

<table>
<thead>
<tr>
<th>Gain Access To</th>
<th>To Escape From</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>Work or activities</td>
</tr>
<tr>
<td>Adult</td>
<td>People</td>
</tr>
<tr>
<td>Peers</td>
<td>Sensory overload</td>
</tr>
<tr>
<td>Preferred items</td>
<td>Pain (emotional or physical)</td>
</tr>
<tr>
<td>Sensory input</td>
<td></td>
</tr>
</tbody>
</table>

We will refer to this chart many times in this book, as we learn to build BIPs based on function of behavior rather than our reaction to the behavior. A FBA should determine the reason behind the behavior. This can be done by looking at what happens in the environment because of the behavior. For example, if a child fails to bring a pencil to class and the teacher always sends the child to the office for not having a pencil, then the function of the behavior is most likely escape. It is much more entertaining to sit in the office waiting to see the principal than it is to sit in math class and do 50 algebra problems.

Instead of answering 16 questions on a survey, the team writing this BIP should have collected data to determine the consequences that occurred in the environment after each exhibition of the behavior. For example, if every time the young lady screamed an adult removed the task demand, then the function of the behavior may have been to escape nonpreferred activities. If the young lady screamed and most of the time three peers came over to calm her, then the function of the behavior
might be to gain peer attention. If the young lady screamed and most of
the time an adult came over and started talking to her about her behav-
ior, then the function of the behavior might be adult attention. Taking
data allows us to have discussions with the BST about what we think
might be feeding the behavior.

The next rule about behavior is that behavior is related to the context
within which it occurs. This is true for children, and it is true for adults.
There is not a single person reading this book who would walk into their
place of worship and make ugly faces at all the people inside. Nor would
a single reader walk into his or her place of worship and say unkind things
or use single-digit sign language. Yet many readers, when cut off on the
highway by a careless driver, have engaged in all three behaviors. Behavior
is related to the context within which it occurs.

This is the reason that parents and teachers sitting together for parent-
teacher conferences are often discussing two different children. Teachers
will say, “Your child is constantly up out of his seat and walking about the
room and disturbing others.” The parents will say, “They never do that at
home.” School and home are two distinctly different contexts. Figure 1.3
shows a comparison of the contexts.

**Figure 1.3**  Context Comparison

<table>
<thead>
<tr>
<th>School</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitting on hard wood or plastic chairs for</td>
<td>Sitting on cushioned seats, lying on</td>
</tr>
<tr>
<td>approximately seven hours per day</td>
<td>cushioned areas, or sprawled out on the</td>
</tr>
<tr>
<td></td>
<td>floor</td>
</tr>
<tr>
<td>Limited access to food and drink</td>
<td>Usually, free access to all the water</td>
</tr>
<tr>
<td></td>
<td>and snacks they desire</td>
</tr>
<tr>
<td>Limited access to proprioceptive input</td>
<td>Unlimited access to proprioceptive input</td>
</tr>
<tr>
<td>(the ability to get up and move around)</td>
<td></td>
</tr>
<tr>
<td>Limited access to auditory and visual</td>
<td>Free access to visual and auditory</td>
</tr>
<tr>
<td>stimulation</td>
<td>stimulation</td>
</tr>
</tbody>
</table>

A FBA should not only determine the reason behind the behavior but
also under what conditions the behavior occurs (Dunlap et al., 2010).
Frequently, there are patterns to behavior. These patterns are known as
antecedents because they precede the behavior. These are just a few of the
many patterns that may emerge from data analysis:
• Day of the week
• Time of day
• Academic subject
• Absence or presence of a certain person
• Transitions
• Directives given

Sometimes, there are setting events that pair with these antecedents. For example, in Chapter 8, we will learn about a young man who had three antecedent patterns that occurred prior to his self-injuring behavior on some days and not on others. After three months of data gathering, the BST was able to discern a setting event of the young man having a sinus infection when paired with these three antecedents. This allowed the team to determine the function behind the behavior and the patterns preceding it.

The FBA should look at what consequences follow the behavior. This gives us an indication of what might be maintaining this behavior.