

# Behavior, Topography, and Function

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## WHAT'S COVERED

This lesson will explore behavior management by defining and discussing the following:

1. Definition of Behavior
2. Types of Behavior
  - a. Topography
  - b. Function

## 1. Definition of Behavior

As we learned in the previous unit, we can use ABA as an intervention for individuals with autism spectrum disorder (ASD). We do this through behavior management and skill repertoire building. Behavior management helps us reduce challenging or problem behaviors, and skill repertoire building helps us teach new behaviors. We will first focus on behavior management and the reduction of problem or challenging behaviors.

Before we learn the techniques for changing behavior, we first have to know what is causing the problem behavior. **Behavior** is anything that a person says or does. This can include both public behavior and private behavior.

Public behavior refers to things that occur externally that other people are able to observe happening. Examples of public behavior include

- speaking
- walking
- eating
- running
- jumping
- playing

Private behavior encompasses things that occur internally that are not observable to other people. Examples of private behavior include

- thinking
- feeling
- wanting

- knowing

In behavior analysis, we often address **problem or challenging behavior**, which is a behavior that negatively impacts a patient or others.

Many aspects of behavior can be “challenging” or “problematic” and, therefore, require treatment. With some behaviors, the need for treatment is obvious, while other behaviors are only problematic under certain circumstances or when they affect the patient’s quality of life.

Typically, treatment is warranted when the behavior

- poses a risk of physical harm to the patient or others
- interferes with the patient’s ability to learn new skills
- limits the patient’s access to less restrictive settings
- increases the likelihood of intrusive interventions such as exclusionary time-out, restraint, or management of behavior through medication
- reduces the patient’s contact with preferred items or activities
- inhibits social interactions

Some examples of challenging behaviors include

- aggression
- self-injury (such as hitting or scratching self)
- property destruction
- tantrums



#### TERMS TO KNOW

#### Behavior

Anything that a person says or does

#### Problem or Challenging Behavior

A behavior that negatively impacts a patient or others

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## 2. Types of Behavior

We have two ways in which we can describe behavior: topography and function.

### 2a. Topography

**Topography** is the physical shape or form of the behavior, referring to what it looks like, what it sounds like, and how long it lasts. Topography helps us recognize the behavior as it describes or paints a picture of it.

#### IN CONTEXT

Imagine that there are several ways to get light in a room. You can turn on a flashlight, use a match to light a candle, open the drapes or blinds, or simply flip on the light switch in the room.

Each of these options illuminates the room, but they have a different topography. They look very

different, and each of them lasts a different amount of time (i.e., the time it takes for the flashlight batteries to die, for the candle to burn out, or even for the power to go off or lightbulb to burn out).

➦ **EXAMPLE** There are many ways to open a bag of chips. You can tear off one corner, grab each side and pull the bag open, or get a pair of scissors and cut the top off of the bag. The end result of all of these is that the bag is open so you can now devour your delicious chips. But each had a different topography and looked and sounded different.



#### THINK ABOUT IT

Why do you think this is important?

This can be important because you might do the same thing or engage in the same behavior, but the way that you do it might be very different and lead to different outcomes.

➦ **EXAMPLE** For instance, if you yell “STOP!” as loud as you can while a stranger is running toward you, people might immediately turn to see what is going on and check if you need help. On the other hand, if you quietly read stop as it is written on a stop sign that is directly in front of you, the response might be very different and it would not appear very out of the ordinary.



#### TERM TO KNOW

### Topography

The physical shape or form of the behavior

### 2b. Function

The **function** of a behavior, or the reason the behavior is occurring, is typically what we are most interested in. It helps us know why the behavior has occurred or what the patient wants to gain by it.

The function of a behavior identifies the reinforcement that maintains the behavior, and so it helps us learn how to respond effectively to the behavior.

➦ **EXAMPLE** Think about the previous example of getting light in a room: the function of the behavior is to produce or access light in the room.

➦ **EXAMPLE** Consider the previous example about the bag of chips: the function is to gain access to the chips that are in the bag.

**Functional reinforcement** is reinforcement specific to the function of the behavior.

➦ **EXAMPLE** Suppose you have just returned from running several miles and, as soon as you enter the room, you ask your friend in the other room to bring you a bottle of water. The function of your behavior is to gain access to water – you just ran and you are really thirsty! When your friend brings the bottle of water to you, that is the reinforcement.

## Video Transcription

Let's look at an example of an individual engaging in object stereotypy to better explain the difference between topography and function. The topography of this behavior is the shaking or manipulating of objects with her fingers in a repetitive motion typically within her line of vision. The function has been

determined to be automatic, meaning the behavior itself feels good, and the individual gains pleasure from engaging in the sensory stimulation of moving the necklace with her fingers. Both topography and function are necessary to identify in order to appropriately intervene with a targeted behavior.



## TERMS TO KNOW

### Function

The reason the behavior is occurring

### Functional Reinforcement

Reinforcement specific to the function of the behavior



## SUMMARY

In this lesson, you learned the **definition of behavior**, which is anything that a person says or does. Behavior can include public behavior, which refers to things that occur externally that other people can observe as they happen, like walking and talking, and private behavior, meaning things that occur internally and that are not observable to other people, like thinking and feeling. Problem or challenging behavior is behavior that negatively impacts a patient or others and is often addressed in behavior analysis.

You also learned that one way to describe behavior is by its **topography**, or the physical shape or form of the behavior: What does it look like? What does it sound like? How long does it last? Lastly, you learned that another way to describe behavior is by its **function**, or the reason the behavior is occurring. The function identifies the reinforcement that maintains the behavior and is critical to knowing how to respond effectively to the behavior in question.



## TERMS TO KNOW

### Behavior

Anything that a person says or does

### Function

The reason the behavior is occurring

### Functional Reinforcement

Reinforcement specific to the function of the behavior

### Problem/Challenging Behavior

A behavior that negatively impacts a patient or others

### Topography

The physical shape or form of the behavior