

The Discrete Trial

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WHAT'S COVERED

This lesson will explore the discrete trial by defining and discussing the following:

1. Discrete Trial Training (DTT)
2. Why DTT Is Used

1. Discrete Trial Training (DTT)

As discussed in previous units, in ABA interventions, we use both skill repertoire building and behavior management procedures. This unit will focus on skill repertoire building, or increasing appropriate behaviors by manipulating antecedents and consequences to teach new skills.

You may not be familiar with the term discrete trial training (also called discrete trial teaching), abbreviated DTT, but in providing ABA to young children with autism spectrum disorder (ASD), people will often wrongly say that ABA and DTT are the same thing.

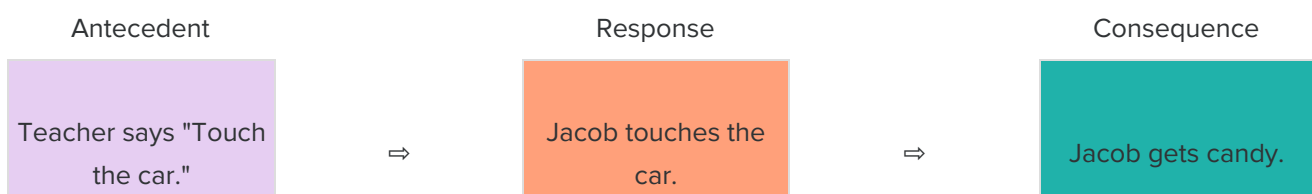
ABA is the application of the principles of behavior to socially important problems. DTT is one teaching technique that can be used in ABA. There are many different methods of teaching skills in ABA treatment programs, and DTT is just one of those methods. DTT and ABA are *not* synonymous.

Discrete trial training (DTT) is a teaching method with a clear beginning, middle, and end used to promote learning new skills (hence, the term discrete). It is made up of this three-term contingency:

- the antecedent, or the discriminative stimulus (S^D) and/or motivating operation (MO)
- the response
- the consequence

The discrete trial is made up of the three-term contingency, the S^D or MO (we will cover these later in the training), a single response, and a consequence. It is then followed by another trial.

➡ EXAMPLE



Video Transcription

[MUSIC] Tell me what that is.

Oranges!

Oranges! Good for you. [MUSIC]

Can you put it on top of the chair?

Yep.

Yay! Give me five, give me five, give me five, Oh! Too slow! Give me five. Oh, too slow! Give me five. Oh, too slow! Give me five. Yes, you got it! [MUSIC]

OK, ready? Stack cups. [STACKING] Yay, [CLAPPING] you did it! Good job. [MUSIC]



HINT

The three-term contingency should look familiar. In DTT, we use the terms S^D and response. For our purposes, S^D is synonymous with antecedent, and the terms “response” and “behavior” are always synonymous.

Stimulus control is a change in the occurrences of a behavior due to a particular stimulus. Repeatedly delivering reinforcement contingent upon a specific behavior in the presence of specific conditions (antecedent stimuli) leads to stimulus control.



TERM TO KNOW

Discrete Trial Training (DTT)

A teaching method with a clear beginning, middle, and end used to promote learning new skills

Stimulus Control

Change in the occurrences of a behavior due to a particular stimulus

2. Why DTT Is Used

DTT is used because individuals with ASD may not always learn by watching others the way typically developing individuals do so effortlessly. As such, our job is to set up as many opportunities as possible so that our patients can learn.

The following outlines a list of reasons why DTT is used as a teaching method in ABA:

1. *A high number of discrete trials can be presented*

Discrete trials allow us to set up those teaching opportunities and present many learning trials per minute, per

hour, and per day. The more trials we present, the more opportunities we are giving a patient to learn.

Video Transcription

Watch me. Do this.

[EXCLAIMS]

That was so smart! Look at you, mister man. Do you want back scratches?

Yeah.

Back scratches.

Ah!

OK, ready? Do this.

That was so smart. You did it! You did it!

[BLOWS RASBERRIES]

OK, here we go. Do this. Nice job, give me ten.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10! You did it!

[LAUGHS]

And again.

Do this.

[LIGHT POUNDING]

Good job. You want to do it again?

Yes.

[BLOWS RASBERRIES]

[LAUGHS]

OK, do this. Oh my goodness you're so smart.

Do it again.

OK.

[BLOWS RASBERRIES]

[LAUGHS]

2. It lets the patient better understand how they are expected to respond

Because the sequence is always the same \mathcal{S} , Response, and Consequence, the patient learns that when an \mathcal{S} is presented, they are expected to respond.

In addition, in everyday situations, prior to treatment, our patients often do not respond to teachers, other adults, or peers. Or, our patients may begin to engage in behaviors that surprise or even scare adults when given instructions.

➦ **EXAMPLE** A relative might ask a child to close the door upon entering the house. The child might then begin to hit himself in the head. This might frighten the relative and cause her to not persist in her instructions. Over time, then, the child learns how to avoid having to comply with instruction. Using DTT, the child is always expected to respond, either on their own or with help.

3. It lets the patient know if their response is correct

This is because a consequence is given immediately after the response, regardless of whether it is correct or incorrect.

Video Transcription

OK. Give me the pizza. Oh, my goodness. You did such a good job.

[BUZZ SOUND]

4. It assists the behavior technician in maintaining consistency

When discussing ABA and its application to the treatment of individuals with ASD, we discussed how crucial it is for consequences to be applied consistently in order to increase a desired behavior such as saying, “I want candy,” and decreasing undesired behaviors such as crying when one wants candy.

In using DTT, a consequence always follows every response and this helps ensure that consequences are applied consistently.

5. It makes it easy to take data and assess progress

Behavior technicians collect data on the patient’s response to the \mathcal{S} s they present throughout the session. The behavior technician must simply circle on a data sheet whether the patient’s response was correct, incorrect, or prompted – meaning the patient was helped to respond correctly.

Typically, we look at the percentage of correct responses or rate of responding, which allows us to assess the

patient's progress. You will learn more about data collection later in the training.

Video Transcription

What's your dad's name?

Mike.

Mike! Good job! Nice job.

When's your birthday?

December 15th.

December 15th! Good job!

How old are you?

Two.

Nice! Can you show me the fingers?

Two.

Two. Good job. Here you go.

What's your mom's name?

Sheryl.

Sheryl. Very good.

Whoops.



TRY IT

All of the above skill acquisition programs come down to stimulus control. The goal of these above programs is to teach an individual how to respond under certain conditions. For instance, if you want to teach someone to identify a dog is a dog, then you are teaching them to say “dog” or point to a “dog” when you show them a picture of a dog (or upon seeing a dog). Therefore you would say the response of identifying a dog is under the control of the stimulus of seeing a dog or a picture of a dog.

For this practice, identify a skill you want to teach someone. Write down the behavior you are trying to teach (e.g., saying dog) and the stimulus that you would want it to come under control of (e.g., upon the presentation of a picture of a dog).



SUMMARY

In this lesson, you learned about **discrete trial training (DTT)**, a teaching method used in ABA with a clear beginning, middle, and end used to promote learning new skills (hence, the term discrete). It is made up of the three-term contingency: the antecedent, or the discriminative stimulus (SD) and/or motivating operation (MO), the response, and the consequence. You also explored these reasons **that DTT is used** as a teaching technique:

- A high number of discrete trials can be presented.
- It lets the patient better understand how they are expected to respond.
- It lets the patient know if their response is correct.
- It assists the behavior technician in maintaining consistency.
- It's easy to take data and assess progress.



TERMS TO KNOW

Discrete Trial Training (DTT)

A teaching method with a clear beginning, middle and end used to promote learning new skills

Stimulus Control

Change in the occurrences of a behavior due to a particular stimulus