

# **Prompting and Error Correction**

by Capella Partnered with CARD

### WHAT'S COVERED

This lesson will explore prompting in errorless learning by defining and discussing the following:

- 1. Error Correction
- 2. Least-To-Most Prompting
- 3. No-No-Prompt-Repeat
- 4. What If Prompts Are Ineffective?
- 5. Prompt Dependency

# **1. Error Correction**

The second of the two primary uses for prompting and fading within skill repertoire building is error correction, used for known or mastered skills and random rotation.

**Error correction** is a procedure following an incorrect or non-response that assists the patient in providing a correct response in the presence of that particular S<sup>D</sup>/MO. It helps decrease errors in the future.

When a target reaches about 80% correct, we begin to use different procedures called error correction procedures, rather than errorless learning and most-to-least prompting. Error correction procedures will be used contingent on any of the following:

- When a patient's response includes extraneous behavior
- When a patient takes longer than three seconds to respond
- When a patient does not respond
- When a patient responds incorrectly

Variations of error correction can be used for different patients. Not all error correction procedures will be effective for every patient. Error correction procedures will be individualized for each patient, and your BCBA will determine which is most appropriate and explain how to use it.

The two error correction procedures are designed to allow the patient to be successful on at least 30% of trials. So, behavior technicians should attempt to make sure that the patient will receive a correct response on the third trial regardless of the error correction procedure being used. The BCBA will identify the error correction procedure to be used as well as explain how to use it with the patient.

We have many different styles of error correction procedures we can use with various types of programming.

In this training, we will cover two different error correction procedures to use when the patient gives an incorrect or non-response:

- 1. least-to-most prompt fading
- 2. no-no-prompt-repeat

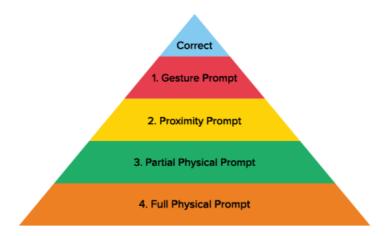
### E TERM TO KNOW

### **Error Correction**

A procedure following an incorrect or non-response that assists the patient in providing a correct response in the presence of that particular S<sup>D</sup>/MO

# 2. Least-To-Most Prompting

**Least-to-most prompting** is an error correction procedure designed for use when you are unsure if the patient really knows the correct response. It involves the use of the least intrusive prompts for that skill, while gradually increasing the intensity of prompts if needed, until the patient is successful.



This procedure is

- typically used for learned or mastered skills
- often used as a prompting strategy in naturalistic teaching formats (NET)
- also used for patients who acquire skills rapidly
- individualized per patient by the BCBA

When you are not sure if the patient knows the correct response, it is inappropriate to deliver two informational "No's" in a row just for the sake of doing so. That is, if you anticipate that the patient will get the response incorrect after the first "No," then why bother to present a second "No"? Doing so would perhaps be aversive and does not lend itself to positive behavioral supports. In this case, your BCBA may tell you to use the least-to-most prompting strategy instead.

This strategy is called "least-to-most" because after giving one "No," you prompt on the next trial using the least intrusive prompt. If the patient still does not respond correctly, then on the third trial you use the last effective prompt to ensure a correct response.



This strategy is also good for patients who have an aversive reaction to getting a response incorrect or to hearing the consequence "No."

Least-to-most prompts:

- Upon error, you might give an informational "No" if instructed by your BCBA.
- Repeat the S<sup>D</sup> and provide the least intrusive prompt. If an error occurs again, provide an informational "No" if instructed by your BCBA.
- Repeat the S<sup>D</sup> and provide the last effective prompt to ensure a correct response.
- Repeat the S<sup>D</sup> without a prompt.

# **Video Transcription**

I want to demonstrate the least to most prompting procedure with you, OK? OK, so my first discrete trial, put with same. No, OK? we're going to feel.

Now I'm going to jump in and prompt you this time, OK? Put with same! OK, good. So I started with the least amount of prompt, and it wasn't successful. So now I'm going to increase it to the next level of prompt, OK?

So I'm going to to use a positional prompt now. Put with same! No, OK?

So this time, I'm going to use a positional. And I'm also going to give a partial physical prompt, OK? Put with same! Very good! That's putting with same.

OK, now I'm going to fade those out. Put with same! Nice job!

And now I'm going to remove the positional prompt. Put with same! Excellent! Way to go!

OK, so you can see, I start with the lowest level of prompt. If it doesn't work, I keep increasing it until I get to a point where you're successful. And then I want to take it back out, OK? So that's least to most prompting. All right.

Let's revisit the clapping target. We will say that the patient has demonstrated this skill correctly approximately 80% of the time.

### ℅ EXAMPLE Target: Clapping

None: The prompt hierarchy starts from least to most intrusive, beginning with "None" indicating no prompt.

- 1. Gesture prompt: prompting the patient by demonstrating what you want them to do. The behavior technician brings their own arms upward as if to begin clapping.
- 2. Partial physical prompt: prompting the patient's arms up with slight touch to the patient's elbow.
- 3. Partial physical prompt: prompting the patient's arms up with slight upward guidance directed at the patient's forearms.

4. Full physical prompt: hand over hand with the patient's hands, pick up hands and bring them together in a clapping motion.

Note, you begin without prompts. If the patient does not give a response or gives an incorrect response, you might give an informational "No." Repeat the S<sup>D</sup> and if an error occurs again, move to the least intrusive prompt – in this case, that was the gestural prompt.

If an error occurs again, you might provide the informational "No." Repeat the SP and provide the last effective prompt to ensure a correct response (for this example, let's say the last effective prompt was the first partial physical prompt, prompting the patient's arms up with a slight touch to the patient's elbow.) This ensures the correct response as we used the last effective prompt for the patient.

Repeat the S<sup>D</sup> without a prompt.

### TERM TO KNOW

### Least-To-Most Prompting

A prompting procedure involving the use of the least intrusive prompts for that skill, while gradually increasing the intensity of prompts if needed, until the patient is successful

# 3. No-No-Prompt-Repeat

**No-no-prompt-repeat** is often used when presenting S<sup>D</sup>s that the patient has responded to correctly in the past. This method is an error correction procedure consisting of the delivery of a prompt following two unsuccessful trials or attempts at responding, correcting the error of a mastered skill. This allows the patient two opportunities to respond correctly prior to receiving a prompt.

No-no-prompt-repeat is a different variation of the least-to-most prompting procedure. The behavior technician presents an instruction without a prompt in order to give the patient a chance to respond independently.

No-no-prompt-repeat operates as follows:

- Upon error, give an informational "No."
- Repeat the S<sup>D</sup>. If an error occurs again, give an informational "No."
- Repeat the SS<sup>D</sup>D, and provide the last effective prompt to ensure a correct response.
- Repeat the S<sup>D</sup> without a prompt.

# **IN CONTEXT**

Here is an example of no-no-prompt-repeat in practice.

If our behavior technician, Demond, knows that the patient knows how to respond to the instruction, "Sit down," he might use the no-no-prompt-repeat error correction procedure.

Using no-no-prompt-repeat, Demond would present the S<sup>D</sup>, "Sit down." If the patient does not respond within three seconds or responds incorrectly, Demond would present a short, clear, "No."

Demond would then present the S<sup>D</sup>, "Sit down," a second time. If the patient again responded incorrectly, Demond would say, "No," for the second time.

Demond would then present the S<sup>D</sup> a third time and this time he would prompt the patient to respond.

Finally, Demond would present the S<sup>D</sup> a fourth time so that the patient responds correctly without the prompt.

Regarding reinforcement, if the patient requires prompting with responses we know they can give without prompts, we do not present a strong reinforcer following the prompted trial. The behavior technician presents the strong reinforcers when the patient responds correctly and independently.

# **Video Transcription**

Give me orange.

No.

Give me orange.

No.

Give me orange.

Hey, that's right. This is orange. Good for you.

Give me orange.

Wow, you did it lady. Good job.

### 

- Target: "What is your name?"
- Correct response: "Jasmine."

Behavior technician: "What is your name?"

Patient: "Mary."

Behavior technician: "No, try again. What is your name?"  $(\ensuremath{\text{No}})$ 

Patient: "Jimmy."

Behavior technician: "No, try again." (No)

Behavior technician: "What is your name? Ja..." (Prompt)

Patient: "Jasmine!"

Behavior technician: "Nice job! Ok, all by yourself, what is your name?" (Repeat)

Patient: "Jasmine!"

Behavior technician: "Wahoo! You got it!"

# **Video Transcription**

OK. You ready? Give me black and white.

Black and white.

No. Try again.

[INAUDIBLE] or white.

Give me black and white.

Black. Black or white.

No. Try again. Give me black and white. Awesome. That is black and white.

Black and white.

Mm-hmm. Give me black and white.

Black and white.

It is. High five. Nice work.

### E TERM TO KNOW

### **No-No-Prompt-Repeat**

An error correction procedure consisting of the delivery of a prompt following two unsuccessful trials or attempts at responding, correcting the error of a mastered skill

# 4. What If Prompts Are Ineffective?

What do you do if you give a prompt, but it is ineffective? Your BCBA may ask you to provide an informational "No" and re-present the S<sup>D</sup> with a prompt guaranteed to result in a correct response.

Note, do not provide more than one prompt on a given trial. Otherwise, the time between the  $\mathfrak{P}$  and the reinforcer for a correct response is too long.

This approach results in a failure to obtain stimulus control as the  $\mathfrak{P}$  is no longer being paired with

reinforcement for a correct response because so much other behavior is occurring between the S<sup>D</sup> and the reinforcer.

HINT

Remember, the descriptor "discrete" in the term discrete trial indicates that the trial has a definite beginning and end.

If, for some reason, even the most intrusive prompt is not effectively getting the patient to respond correctly, it may be useful to move to a couple trials targeting a maintenance item (an item already mastered) before going back to working on the target.

This procedure has been termed in the behavioral literature as a high-p low-p procedure (discussed in a previous unit, also called behavioral momentum). This means that you provide an S<sup>D</sup> that has a high-probability of resulting in a correct response for two to three trials and then sneak in an S<sup>D</sup> that has a low-probability of resulting in a correct response.

Research has demonstrated that a high-p low-p procedure may lead to an increased likelihood of the low-p behavior by building momentum with correct responses to the high probability S<sup>D</sup>s.

⇐ EXAMPLE When a patient responds incorrectly to a prompt:

- Noah is learning to respond to the instruction "Clap your hands." Carrie presents the \$\Delta\$ "Clap your hands" and prompts using a model prompt (i.e., Carrie claps).
- Noah does not respond, therefore the prompt was ineffective.
- Carrie says "No" and re-presents the S<sup>D</sup> "Clap your hands" while providing a full physical prompt to guide Noah to clap.
- Notice that in this example, Carrie used a prompt that would guarantee success.

# 5. Prompt Dependency

Sometimes, a patient can become dependent on prompts to complete tasks, meaning they will not respond or perform the skill unless the prompt is given, even if the skill has been mastered.

**Prompt dependency** refers to when patients require prompting to perform a skill and the prompt cannot be faded successfully. Patients are not demonstrating the ability to discriminate between responses without prompts due to ineffective prompt fading

Here are some ways that we can work to avoid prompt dependency and program for independence:

1. Use the least intrusive prompt possible.

Are you using a physical prompt with the patient when a gestural prompt will suffice?

# **Video Transcription**

All right. Brush your teeth.

[LAUGHS]

### [GROANS]

Nice job turning off that water.

[TOOTHBRUSH BUZZING]

I like how you got the top.

[LAUGHS]

There you go. Nice job getting all those teeth, Lex. Good job.

[INAUDIBLE]

There you go, getting those bottom front. Mm-hmm. Good job.

2. Use differential reinforcement.

Reinforce completing the task without prompts or with the least intrusive prompt possible.

# **Video Transcription**

What colors? Purple and pink.

Purple and pink.

Very nice.

Nice job.

What colors?

Purple and pink.

[EXCITED SOUNDS]

Did you do it by yourself?

So good.

You did!

You ready?

Good job.

| What colors?                           |
|--|
| Green and yellow.                      |
| So good!                               |
| Nice job.                              |
| Oh my gosh!                            |
| [INAUDIBLE]                            |
| Did you do it?                         |
| I'm so excited.                        |
| You did it! Did you do it by yourself? |
| Yeah!                                  |

3. Avoid inadvertent prompting.

You want the patient to be successful so you might be prompting without realizing it.

 $\Leftrightarrow$  EXAMPLE Beginning to make the sound "d" for the correct response "dog."

# Video Transcription Give me fork. Nice job. Sive me fork.

### 4. Review past data.

Has the patient demonstrated mastery in the past without prompts? Be on the lookout for prompt dependency and note what was the least intrusive prompts last used with the patient.

### 5. Communicating with the team and BCBA about prompts used.

Make sure that everyone is on the same page and no one is prompting "too much"!

# TERM TO KNOW

#### **Prompt Dependency**

Patients require prompting to perform a skill and the prompt cannot be faded successfully.

### SUMMARY

In this lesson, you learned about the second of the two primary uses for prompting and fading within skill repertoire, **error correction**, a procedure following an incorrect or non-response that assists the patient in providing a correct response in the presence of that particular S<sup>D</sup>/MO. Note that error correction is used when a target reaches about 80% correct, to decrease errors in the future. Next, you covered two different error correction procedures to use when the patient gives an incorrect or non-response: **least-to-most prompt fading**, used when you are unsure if the patient really knows the correct response, involving the use of the least intrusive prompts for that skill, while gradually increasing the intensity of prompts if needed, until the patient is successful; and **no-no-prompt-repeat**, used when presenting S<sup>D</sup>s that the patient has responded to correctly in the past, consisting of the delivery of a prompt following two unsuccessful trials or attempts at responding, correcting the error of a mastered skill. You learned what to do **if prompts are ineffective**, by providing an informational "No" and re-presenting the S<sup>D</sup> with a prompt **guaranteed** to result in a correct response. Lastly, you learned about various ways to avoid **prompt dependency**, which refers to when patients require prompting to perform a skill and the prompt cannot be faded successfully.

### 📔 🛛 TERMS TO KNOW

#### **Error Correction**

A procedure following an incorrect or non-response which assists the patient in providing a correct response in the presence of that particular  $S^D/MO$ .

#### Least-To-Most Prompting

A prompting procedure involving the use of the least intrusive prompts for that skill, while gradually increasing the intensity of prompts if needed, until the patient is successful.

#### No-No-Prompt-Repeat

An error correction procedure consisting of the delivery of a prompt following two unsuccessful trials or attempts at responding, correcting the error of a mastered skill.

#### **Prompt Dependency**

Patients require prompting to perform a skill and the prompt cannot be faded successfully.