Behavior Chains and Chaining Procedures

Goals
- Learn what a behavior chain is; how behavior chains fall into the 3-term contingency, what a task analysis is and how they are created
- Learn the 3 chaining procedures: forward, backward, and total task chaining
- Graduated guidance prompts to teach behavior chains
- Data collection and evaluation of behavior chains

A behavior chain is a set of responses that when completed in order, result in a larger response (e.g., making lunch, getting dressed).

Behavior chains are tasks that require steps be completed in a specific sequence to successfully complete the whole task. Entire tasks are dependent on each step, and each step is signaled by the step before.

3 Term Contingency
In a behavior chain the consequence of the behavior/response is also the antecedent to the next behavior.

$$A \rightarrow B \rightarrow C/A \rightarrow B \rightarrow C/A$$

A task analysis (TA) is used to break down the steps of a behavior chain.

A task analysis is a written list of the component responses that make up a behavior chain.

Task analyses
- are necessary so the teacher knows what to teach in exactly what order
- promote consistency if multiple teachers are teaching the same behavior chain
- are used to collect data for the evaluation process

Create your TA_____teaching a behavior chain. Each step is a discrete response in the chain.

- Write each step down.
- Perform each step yourself.
- Write down each response as you go along.
- Show the completed TA to another person and get feedback.
    - there may be many different versions, e.g. Should the learner wet the toothbrush before or after applying toothpaste? When shoe tying does the bunny run around the tree or do you cross his ears?
- Where will skills be taught?
- What material are necessary?
- Are there differences depending on where you do implement the TA?

Washing hands

Home	School
Faucet lifts up & down	2 handles- hot and cold
Bar soap	Dispenser soft soap
Towel	Hand dryer

- With my specific client in mind, do I need to add or subtract steps?

Try it yourself. Write a hand washing task analysis.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

Chaining Procedures

There are 3 types of chaining procedures: forward, backward, and total task.

Forward Chaining:
Teach one step at a time, starting with the first step in the task analysis.

Step 1 = praise and R+
Steps 1-2 = praise and R+
Steps 1-3 = praise and R+

When first teaching how to get dressed with forward chaining_____(I do / do not) provide the reinforcer after the 1st step.
  ○The student does not do the rest of the task independently.

I fade prompts until the student can do the first step independently, then provide _____
I can then prompt the next step and repeat, adding one step at a time.

Backward Chaining:
Teach one step at a time starting with the last step in the task analysis.

Steps 1-9 assist or do for/with the child
Teach step 10 using prompts = praise and R+

Fade my prompts until step 10 is independent Now I
prompt step 9
Praise and R+ after steps 9 and 10 are complete

Step 1-8 I assist, steps 9-10 = R+
Step 1-7 I assist, steps 8-10 = R+
Step 1-6 I assist, steps 7-10 = R+

Provide R+ after the_____step of the chain.

Write a task analysis for tooth brushing.

When teaching with a:
Forward chain: start with teaching the step of＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿.
Backward chain: start with step of＿＿＿＿＿＿＿＿＿＿＿＿＿.

Total Task Chaining:
Teach all steps at the same time.
Provide support on＿＿＿＿＿＿＿step as needed.
Provide praise at each step along the way.
Reinforce when the＿＿＿＿＿＿＿＿＿task is done.
Fade prompts as you go until student can do each of the steps＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿.

Graduated Guidance
Start with the maximum amount of guidance and slowly remove＿＿＿＿＿＿＿＿＿＿＿＿＿prompts. Reduce the proximity and intensity of prompts over time.

For example, hand-over-hand fades to a tap on the＿＿＿＿＿＿＿＿＿＿, which fades to resting my hand on the shoulder.

How do I choose which chaining procedure? It depends on the client's history of success.

Use total task chaining when:
    a) The client already knows some of the steps
    b) The client learns chains quickly

Use forward chaining when:
    a) The client has difficulty learning multiple steps at once. This allows a focus on each step.
    b) Relatively easy responses are needed at the beginning of the chain. This allows the child to be immediately successful and build momentum for harder steps later in the＿＿＿＿＿＿＿＿＿＿＿＿＿.

Use backward chaining when:
    a) The client has difficulty learning multiple steps at once -same as forward chaining.
    b) The end of the chain results in something the client likes- e.g. "making a snack" ends with eating a snack. Backward chains also allow the client to access the preferred reinforcer more often.

Data Collection and Evaluation
When teaching behavior chains, data are collected on the steps of the task analysis.
- + For step completed independently
- - For step assisted
- Leave blank for steps not yet addressed

Forward chaining data collection will start at the＿＿＿＿＿＿＿and work its way down the TA. Backward

chaining data collection will start with the＿＿＿＿＿＿＿＿＿＿＿＿＿step and work＿＿＿＿＿＿the TA.

Total task will have each step scored, either + or -.