Forming and Analyzing Behavioral Chains:

What is a behavioral chain?

Behavioral Chain: a complex activity with links occurring in a certain order, usually including motor responses

- each step comprises of two parts: a discriminative stimulus (Sd) and a response (R)
 - each R (except for the last one) results in an Sd for the next R
 - each Sd except for the first one serves as a reinforcer for the last R

Doing a Task Analysis:

<u>Task analysis</u> -> when you identify the antecedents + responses and all the required sequences that make up the behavioral chain

- the objective of this is to figure out the component responses required to perform the chain + what order they should be carried out

How to Teach Behavioral Chains:

- 3 approaches are used to teach behavioral chains: forward chaining, backward chaining, and total-task presentation
 - forward + backward chaining methods teach each step individually and then connect it to the adjacent one

Forward Chaining:

- involves teaching one link at a time in sequence starting with the first step in the behavioral chain which leads to reinforcement
 - prompting (modeling or physical guidance) is commonly used to teach each step

Backward Chaining:

- teaching one link at a time in the reverse sequence, beginning with the last one in the behavioral chain useful if the last chain is particularly difficult
 - the behavioral analyst performs the first few steps in the chain and then the target person performs the last one. Once they have mastered that step, their training would progress by adding the next-to-last response and so on
- it is important to use backward chaining if being able to perform one of the last links will enhance the success of the learning or the safety of the target person

Total-Task Presentation:

- involves teaching all of the links together in a full sequence rather than teaching the links separately and putting them together
 - for responses that people cannot do independently, the behaviour analyst would assist by providing prompts, and the prompts are faded

Is One Training Method Best?

- total-task presentation is often the most effective method and is most likely to work best when the target person can already perform many of the links in the chain