How to Use the Ladder of Inference to Check Your Thinking

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This is a tool to check your thinking—in other words, how you arrive at certain conclusions and decisions—so that you can avoid errors in thinking that lead to costly mistakes. Your Teen Pregnancy Prevention (TPP) project can use it to think through:

- **Should we take this action?** For example, should we select this evidence-based program (EBP)? Take this approach to recruitment?

- **Did we come to a conclusion that's true?** For example, is it true that our EBP needs to be adapted? Is it true that we don't have the right implementation partner?

- **Did we make an assumption that's correct?** For example, are we correct in assuming that parents in the community are enthusiastic about our program?

Then use what you uncover to reach conclusions and take actions that you feel confident in. Ultimately, when your thinking is rooted in reality, your program is more likely to succeed.

What is the ladder of inference?

It represents the mental steps we all take when making sense of the world. As with mental models, these mental steps happen quickly and we do them without trying or noticing. As a result, it's hard to see when our thinking is flawed and has led us to draw conclusions and develop beliefs that aren't true.

The ladder of inference starts at the bottom and shows each mental step we take as we go up.[1]

TAKE ACTIONS
Finally, we take actions that are rooted in what we believe to be true.[2]

DEVELOP CONCLUSIONS AND BELIEFS
Based on our assumptions, we draw conclusions. Based on our conclusions, we develop beliefs.

MAKE INTERPRETATIONS AND ASSUMPTIONS
We make sense of the data we have selected and give it meaning. Based on our interpretation, we make assumptions.

SELECT DATA
We notice certain information and experiences. We select what we pay attention to based on our prior experiences and existing beliefs.

GATHER AVAILABLE DATA
This is all the information that is available.

1. Adapted from Chris Argyris by the Waters Center for Systems Thinking. (2020). WatersCenterST.org.
2. Amran, Adam. (2024). Ladder of Inference. https://untools.co/ladder-of-inference.
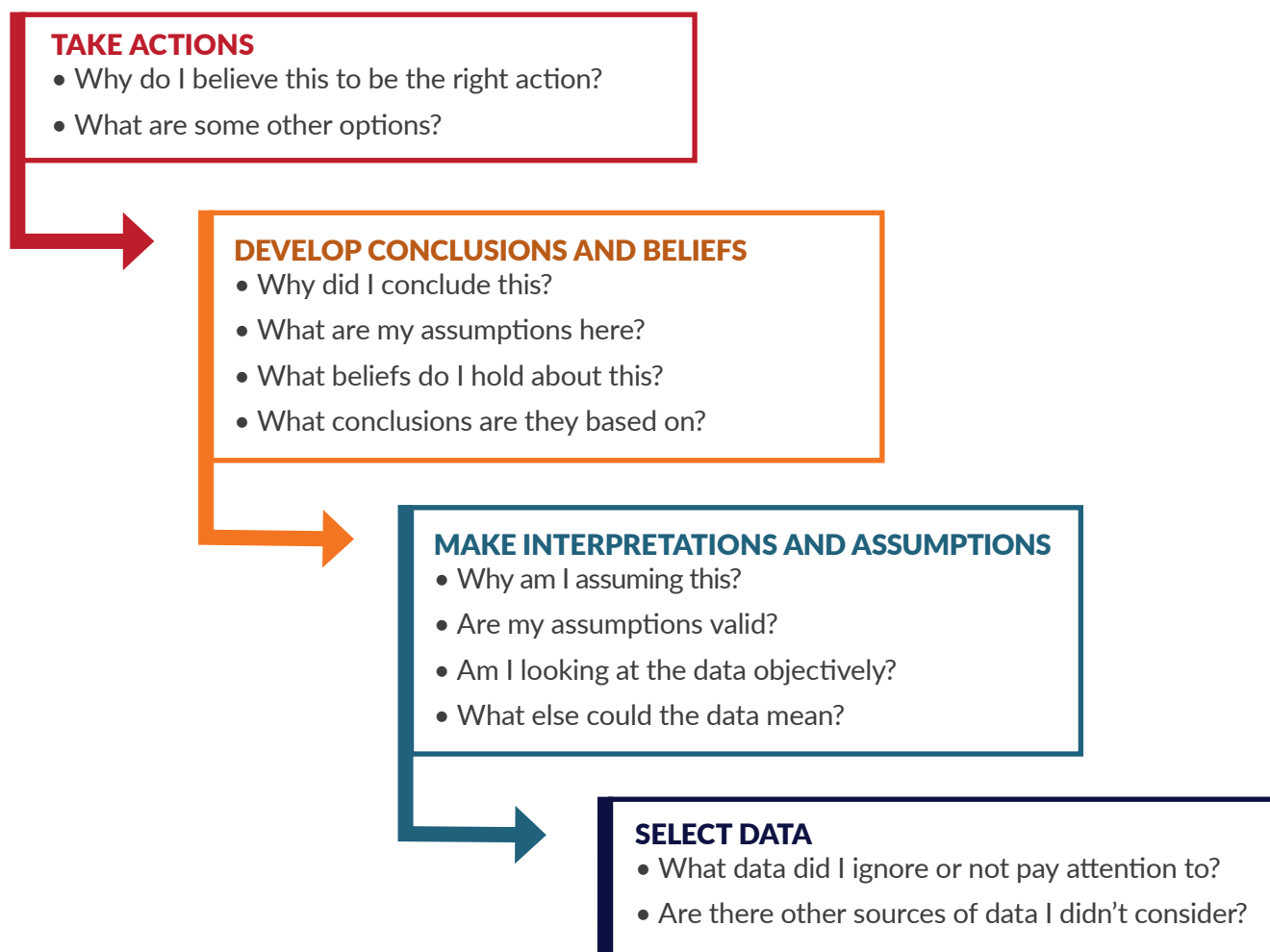
How do I use the ladder of inference?

In addition to being a mental process, the ladder of inference is also a systems thinking tool. Use the ladder of inference tool to check the logic of your actions, conclusions, and assumptions. You can also use it to challenge the thinking of other people and groups.

1. Identify which step of the ladder you are on.

For example, are you about to take an action you're unsure is right? Or worried you're making an assumption that might not be true? Wherever you are on the ladder, start there.

2. Trace the steps you took to arrive there.[3]

Work your way down the ladder, asking yourself questions about each mental step. As you answer these questions, you may find that your reasoning changes along the way.

TAKE ACTIONS
- Why do I believe this to be the right action?
- What are some other options?

DEVELOP CONCLUSIONS AND BELIEFS
- Why did I conclude this?
- What are my assumptions here?
- What beliefs do I hold about this?
- What conclusions are they based on?

MAKE INTERPRETATIONS AND ASSUMPTIONS
- Why am I assuming this?
- Are my assumptions valid?
- Am I looking at the data objectively?
- What else could the data mean?

SELECT DATA
- What data did I ignore or not pay attention to?
- Are there other sources of data I didn't consider?

3. Take a fresh approach to your mental steps.

When you reach the bottom of the ladder, work your way back up again, this time with more intention. As needed, pull in new data and explore alternate interpretations of this data. Be open to this new information leading you to different conclusions, beliefs, and actions.

Example: Recruiting pregnant and parenting teens

You assume that pregnant and parenting teens will flock to your TPP project. But they aren't.

1. Identify which step of the ladder you are on.

You made an assumption. So start at the **interpretations and assumptions** step.

2. Trace the steps you took to arrive there.

TAKE ACTIONS
- Why do I believe this to be the right action?
- What are some other options?

DEVELOP CONCLUSIONS AND BELIEFS
- Why did I conclude this?
- What are my assumptions here?
- What beliefs do I hold about this?
- What conclusions are they based on?

START HERE

MAKE INTERPRETATIONS AND ASSUMPTIONS
- **Why am I assuming that pregnant and parenting teens will flock to our program?** Because I know that our project has value for them.
- **Are my assumptions valid?** No. Our marketing materials don't explain our project's value for them, nor have we described this value to recruitment partners.
- **Am I looking at the data objectively?** There could be other reasons why they aren't signing up.
- **What else could the data mean?** Other reasons why they aren't signing up might be: inconvenient day/time and location, parenting teens need child care in order to participate, they need a warm connection (not a flier) to be persuaded.

SELECT DATA
- **What data did I ignore or not pay attention to?** Our recruitment for all teens tends to be more effective when we rely on alumni and partners.
- **Are there other sources of data I didn't consider?** Talk to alumni about what convinced them to sign up. Ask pregnant and parenting teens what would make them want to sign up.

Example: Recruiting pregnant and parenting teens

3. Take a fresh approach to your mental steps.

Work your way back up the ladder, pulling in new data, exploring alternate interpretations of this data, and staying open to different conclusions, beliefs, and actions.

TAKE ACTIONS
- We should ask project alumni to recruit pregnant and parenting teens.
- We should ask our local Title X clinic to recruit pregnant teens.
- We should ask the local nonprofit that serves parenting teens to recruit participants for our project and ask for advice about providing child care.

DEVELOP CONCLUSIONS AND BELIEFS
- Project alumni can effectively recruit pregnant and parenting teens.
- Our partners that serve pregnant and parenting teens can effectively recruit them.
- We need to offer child care to attract parenting teens.

MAKE INTERPRETATIONS AND ASSUMPTIONS
- Pregnant and parenting teens will be more likely to sign up if someone they trust vouches for our project.
- We won't get many parenting teens signing up if we don't offer child care.

START HERE

SELECT DATA
- We talked to project alumni. Most validated that a warm connection persuaded them to sign up by talking about what they got out of the project.
- We talked to a few pregnant and parenting teens. Day/time and location wasn't an issue but parenting teens confirmed that lack of child care is a blocker to signing up.