

Case Study: Cognitive Behavioral Therapy in Liberia

Theory of Change and Measuring Outcomes

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Objectives today

- Work through a real world example to show how a Theory of Change helps us:
 - Decide what research questions to ask
 - Decide what data to collect
 - Understand the assumptions required for an intervention to have an impact
- Discuss how to identify *valid* and *reliable* indicators for our outcomes

This case study is based on “[Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia](#)” by Blattman, Jamison, and Sheridan (2017), *American Economic Review*.

Background

- Liberia experienced two civil wars from 1990-1996 and 2001-2003
- Despite tremendous progress, urban crime has been a persistent problem
- Many 'youth' aged 18-35 are at high risk of falling into crime
 - Came of age during the crisis
 - Missed-out on skills and education
 - Some are ex-combatants
 - Many feel marginalized by society



Photo: Carly Learson, UNDP (20 November 2014)

How to prevent at-risk youth from falling into crime?

- Usual responses:
 - ‘Tough on crime’ policing
 - Jobs & training
- Cognitive behavioral therapy (CBT)
 - Rooted in psychology and theories of rehabilitation
 - Teaches ‘noncognitive’ skills (‘soft-skills’) like self-control, mindfulness, self-reflection, and planning
 - Promotes a more positive, pro-social self-image



Photo: Carly Learson, UNDP (20 November 2014)

Cognitive Behavioral Therapy (CBT)

- Relative to alternatives, CBT is *targeted* and *short-term*, and therefore inexpensive
- But it's not a substitute for broader reforms targeting systemic or structural inequities that give rise to crime



Photo: Network for Empowerment and Progressive Initiatives (NEPI)

Sustainable Transformation of Youth in Liberia (STYL)

- Developed by the Network for Empowerment and Progressive Initiatives (NEPI)
 - Local NGO run by reformed, formerly at-risk street youth
- Consisted of
 - 8 weeks of group therapy
 - 4 hour group sessions, 3x/week
 - Mentorship by facilitators, many of whom graduated the program themselves



Photo: Network for Empowerment and Progressive Initiatives (NEPI)

Sustainable Transformation of Youth in Liberia (STYL)

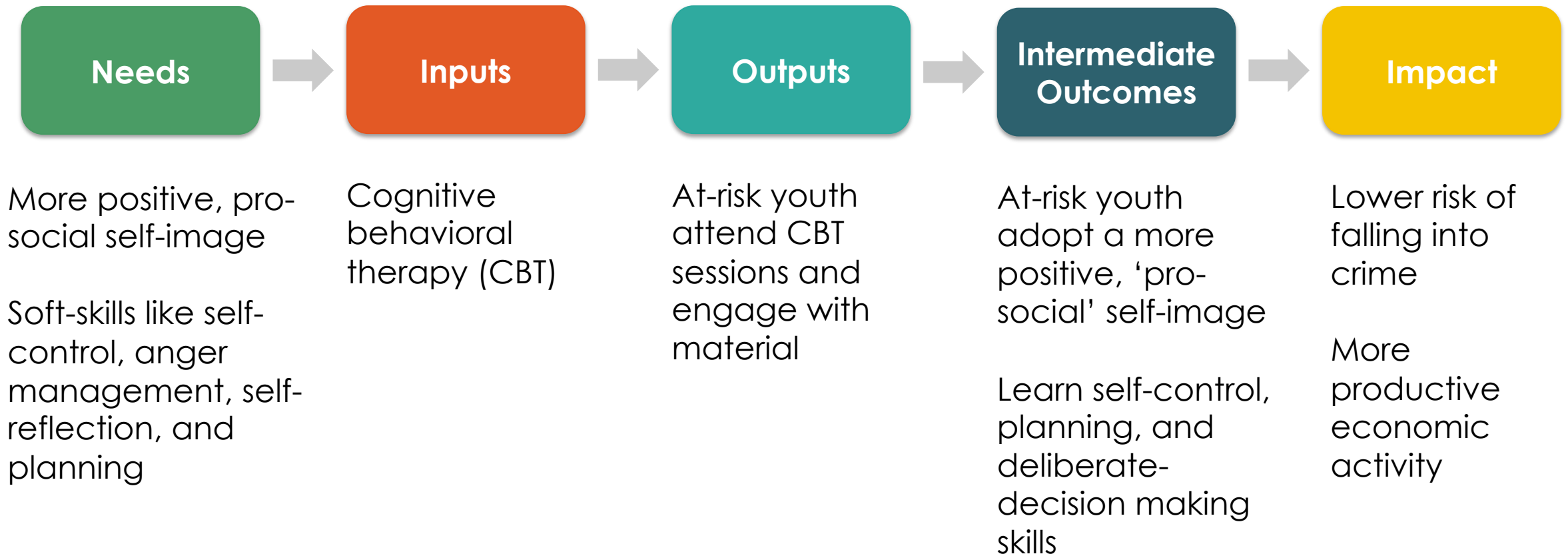
- Curriculum covered a variety of topics and activities:
 - Talk therapy to help recognize problematic behaviors and identify alternatives
 - Role playing to practice non-aggressive responses to provocations
 - Long-term planning
 - Practicing ‘mainstream’ behaviors like visiting a grocery store or bank



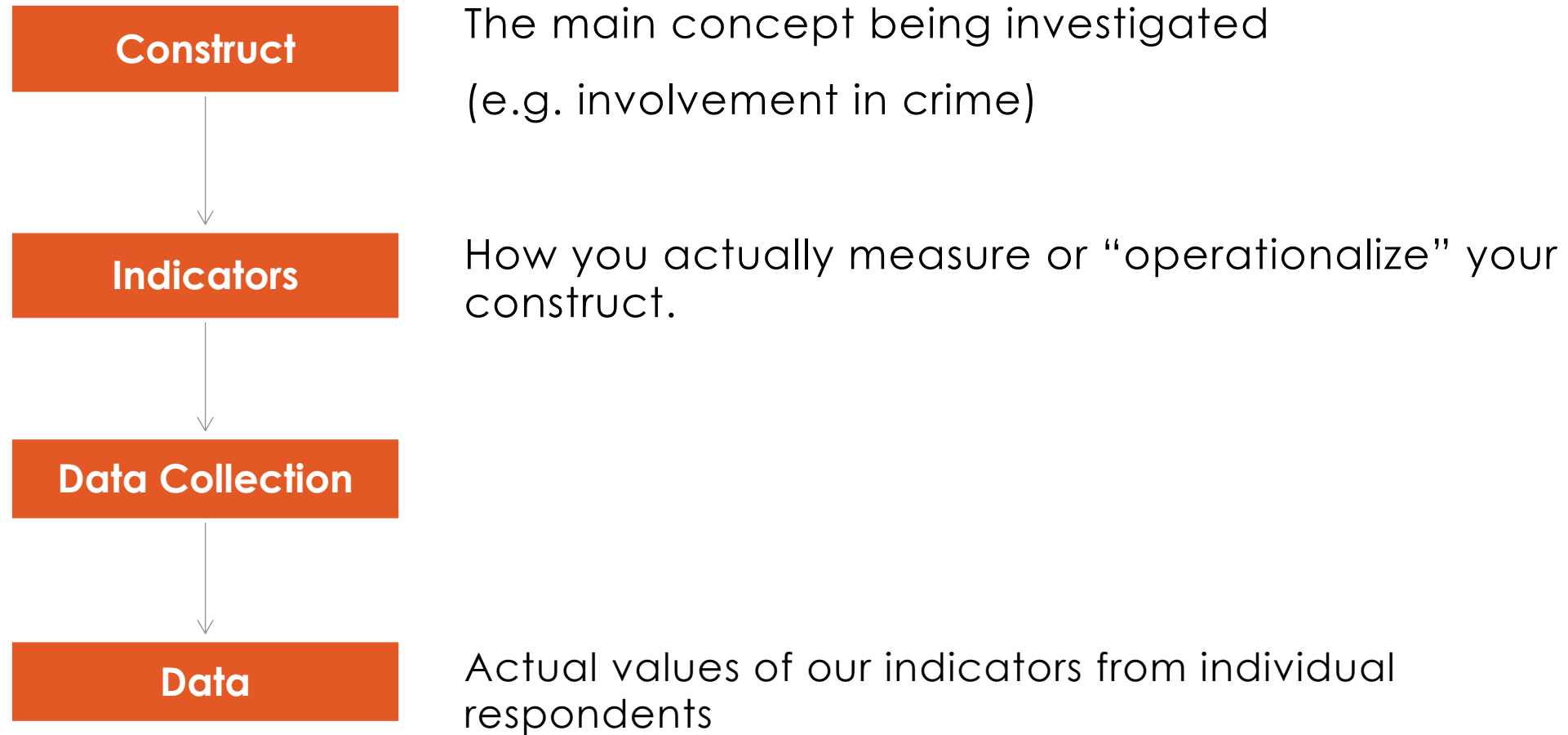
Program Activity: Exposure to “Mainstream” Behaviors

Men practice shopping for goods in a supermarket, using a bank, and other activities, and process successes and failures as a group.

Theory of Change for Cognitive Behavioral Therapy



Measurement concepts



Self-reported crime: a valid and reliable indicator of crime?

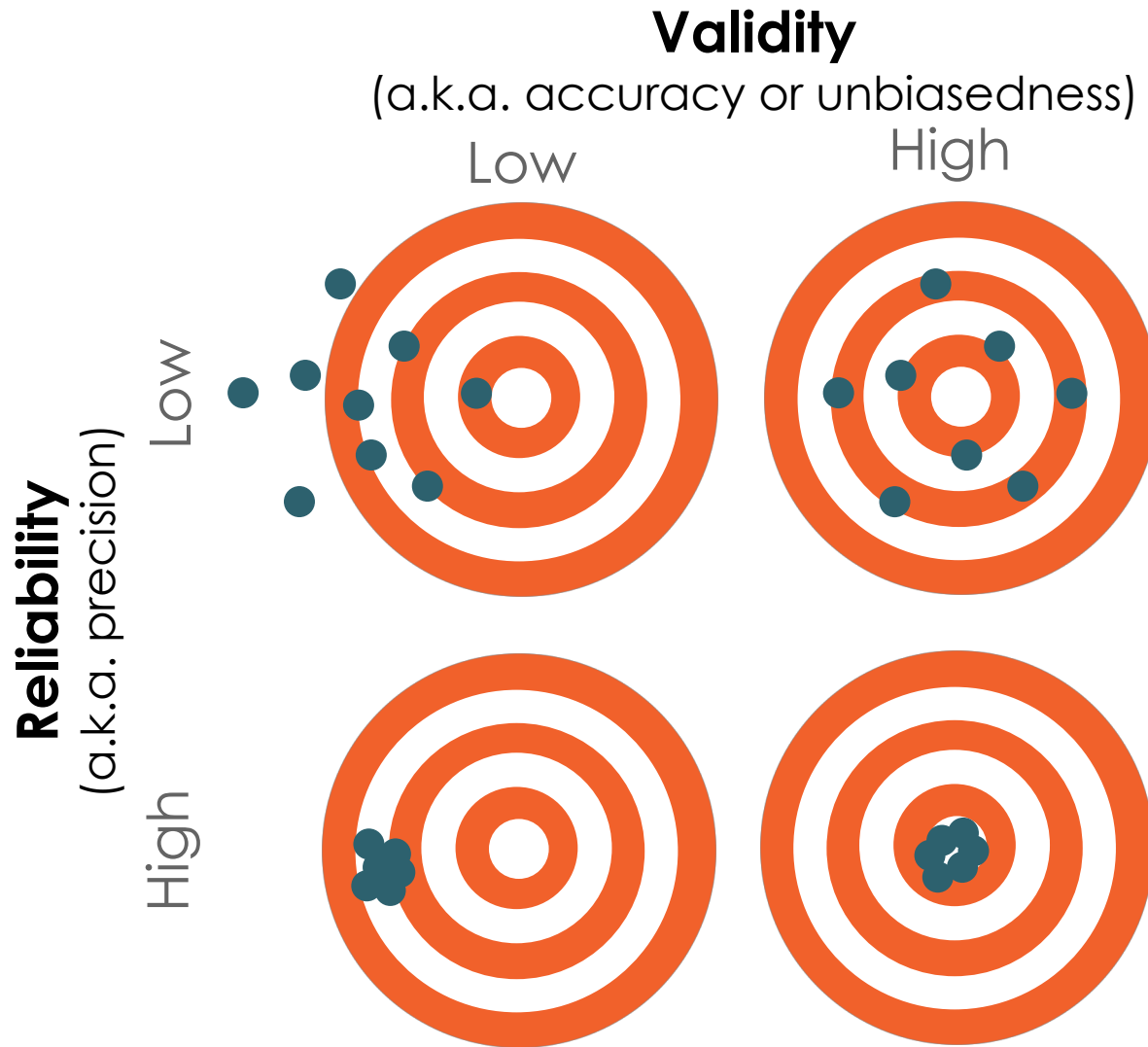
- **Number of crimes committed in the past two weeks:** sum of 15 categories of self-reported crime

590	In the last 2 weeks, have you done any pickpocketing ?	1-Yes, 0-No, 98-Refuse to answer
591	How many times?	Number Pad

598	In the last 2 weeks, have you done any armed robbery?	1-Yes, 0-No, 98-Refuse to answer
599	How many times?	Number Pad

Source: Blattman, Jamison, and Sheridan (2017), Endline Survey

The Goals of Measurement



Scenario 1: Respondents answer truthfully and accurately



The ideal scenario: Our measure is both valid and reliable

Scenario 2: Respondents answer truthfully but have trouble recalling # of crimes in the past two weeks



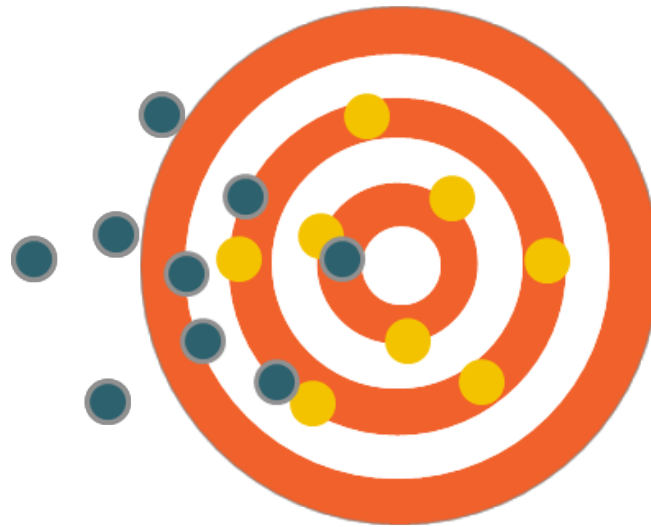
We can handle this scenario: Our measure is valid but not precise

Scenario 3: Respondents do not answer truthfully



This scenario is problematic because it implies our measures are not valid

Scenario 4: Respondents in the comparison group answer truthfully but those in the treatment group do not



Differential measurement error: This scenario is especially problematic

Measuring sensitive behaviors

How to improve the validity and reliability of self-reported outcomes?

Questionnaire design

- Frame sensitive questions in non-judgmental terms
- Build trust by following survey best practices
- Avoid questions that won't be well-received

Qualitative follow-up

- Consider validating survey measures with qualitative follow-up and/or indirect observation

Administrative data

- Use multiple sources of data (e.g. crime or arrest records from the police)



Thank you



References and additional resources

- [“Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia”](#) (Blattman, Jamison, and Sheridan 2017)
- [“Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago”](#) (Heller et al. 2017)
- J-PAL Policy Bulletin: [“Practicing Choices, Preventing Crime”](#)
- J-PAL Evaluation Summary: [“The Impact of Cognitive Behavioral Therapy and Cash Transfers on High-Risk Young Men in Liberia”](#)
- J-PAL Research Resources: [“Measurement & Data Collection”](#)