Data collection & evaluation design options

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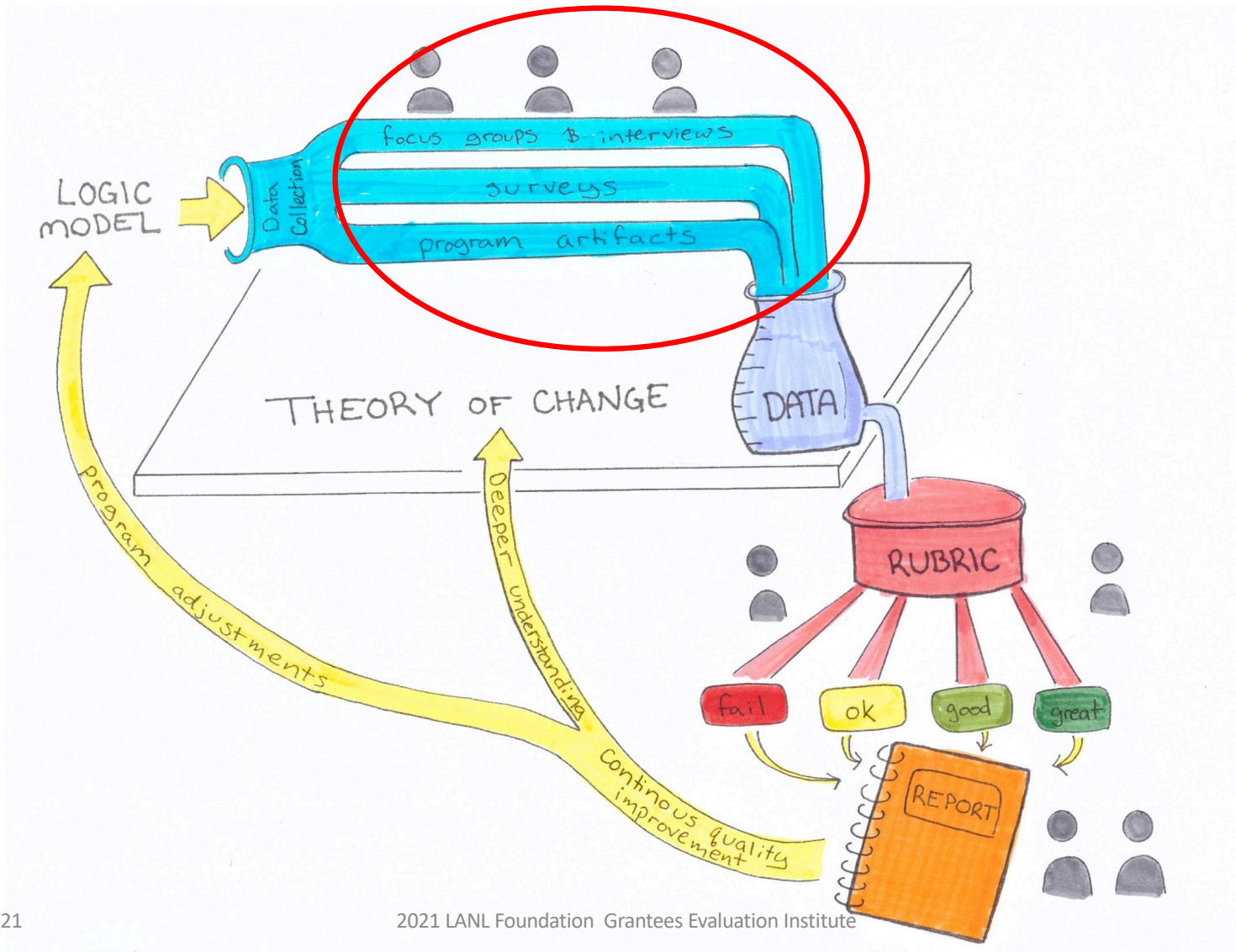
Data collection options

Quantitative and Qualitative data

Quantitative—counts, choices from pre-determined options
- How many?
- How much?
- To what extent?

Qualitative—narratives, open-ended responses
- How would you describe your experience?
- What about our program worked for you?
- How can we make our program better?
- Participant stories about how the program affected them.

Quantitative and Qualitative data

Best to have both!

Your evaluation questions drive the data collection method

Types of data collection

DIRECT:

Artifacts

- Administrative records (demographics, attendance, time in program)
- Assessments and tests
- Student portfolios
- File review
- In-depth case study (can include indirect data)

Observations

INDIRECT:

Participant reports on experience and outcomes

- Surveys
- Focus groups
- Interviews
- Letters, reflections, drawings

Types of Data: *Indirect*

Outputs: participant experience and satisfaction

Outcomes: attitudes, behaviors, knowledge and skills

Surveys: individual responses to written questions
- Choice among pre-determined answers
- Open-ended responses

Focus groups: participant interacts with others in conversations and other open-ended data collection activities

Interviews: one-on-one guided conversation

Letters, reflections, drawings: individual self-expression

Types of data collection: *Direct*

Administrative tracking
- Demographics
- Outputs: attendance, total time in program, completion
- Outcomes: housing, employment, graduation, college enrollment

Assessments and tests
- Outcomes: skills, knowledge, behavior

Student portfolio
- Outputs: projects
- Outcomes: knowledge and skills

Types of data collection: *Direct, continued*

Review of client files
- Outputs: attendance, modality
- Outcomes: progress on goals

In-depth case study
- One participant's experience of outputs and outcomes as documented in administrative records, file, products, interview with participant and staff members

Observations
- Outputs: participant experience (Ex: are participant engagement)
- Outcomes: participant behavior (Ex: parenting skills)

Developing data collection tools

Surveys:
- March ECHO Learning Community
- View training at https://www.youtube.com/watch?v=1x91O5KWOEM

Interviews:
- April 20 ECHO Learning Community

Focus groups:
- May 6 Evaluation Institute: Experience an interactive focus group
- May 18 ECHO Learning Community: Planning an interactive focus group

Questions?

From evaluation questions to data collection

Brainstorm data collection options

Evaluation Question	Data collection options	Notes	Design (pre-post, retrospective or control group)
	Currently in use:		
	Other options:		
	Currently in use:		
	Other options:		
	Currently in use:		
	Other options:		

Brainstorm data collection options

Evaluation Question	Data collection options	Notes	Design (pre-post, retrospective or control group)
Are parents using new skills in an effective way?	Currently in use: **Protective Factors Survey**	We could integrate a reflection letter into our parenting skills program. Staff could evaluate parenting skills by observing parent/ child interactions and using the rubric we developed.	
	Other options: **Parents write a letter with examples.** **Staff observations.**		

Questions?

What's next

1:00-1:20pm   Brainstorm data collection options (orgs)

1:20-1:50pm   Share work (small groups with facilitator)

1:50-2:10pm   BREAK

2:10-2:35pm   Evaluation design

2:35-3:05pm   Work on evaluation design

3:05-3:20pm   BREAK

3:20-3:50pm   Share work (small groups with facilitator)

3:50-4:20pm   Debrief

4:20-4:50pm   Optional: Continue work on data collection & evaluation design

4:50-5:00pm   Close / Survey

Breakout rooms

What's next

2:10-2:35pm   Evaluation design

2:35-3:05pm   Work on evaluation design (orgs)

3:05-3:20pm   BREAK

3:20-3:50pm   Share work (small groups with facilitator)

3:50-4:20pm   Debrief

4:20-4:50pm   Optional: Continue work on data collection & evaluation design

4:50-5:00pm   Close / Survey

Evaluation design

Your participants are doing great. . .

compared to what?

Comparison group is key to being able to say something about your program's effectiveness

- Participant at start vs. end of program

- Participant vs. non-participant

Evaluation design options

1. Retrospective

2. Pre-post

3. Participant and non-participant (control group)

1. Retrospective – participant compares pre and post after the fact

Sample   Intervention   Posttest (current and prior skill)

ILLUSTRATION 6.2 Retrospective Pretest Design

Source: Russ-Eft and Preskill, *Evaluation in Organizations*

1a. Retrospective: Quantitative

UNM Evaluation Lab
Assessment of Evaluation Competencies

Utilizing the following scale, please select the rating that best fits your level of competence **Before Fellowship** and **Now** for each item listed.

0 = I don't know what that is
1 = Do not feel comfortable doing
2 = Can do with a lot of guidance
3 = Can do with light supervision
4 = Can do on my own
5 = Can teach someone else to do it

Before Fellowship	Competency	Now
Quantitative data collection, management and analysis		
0 1 2 3 4 5	1. Finding standardized scales	0 1 2 3 4 5
0 1 2 3 4 5	2. Protocol development	0 1 2 3 4 5
0 1 2 3 4 5	3. Writing summaries of quantitative data findings	0 1 2 3 4 5
0 1 2 3 4 5	4. Database development	0 1 2 3 4 5
0 1 2 3 4 5	5. Data entry	0 1 2 3 4 5

1b. Retrospective – qualitative

- People's stories of how the program changed them can be very powerful
  - And if universal or randomly selected, the stories are credible (and not just anecdotal)
- Example: you ask participants to write a letter with an example of how they use a skill they learned in your program

Retrospective Design

- Advantages
  - You get participants' view of their progress
  - You only have to have your evaluation act together by the end of the program (not at the beginning)

- Drawbacks
  - Participants may downplay their skills at the beginning to show growth.

2. Pre-Post – comparison before and after program
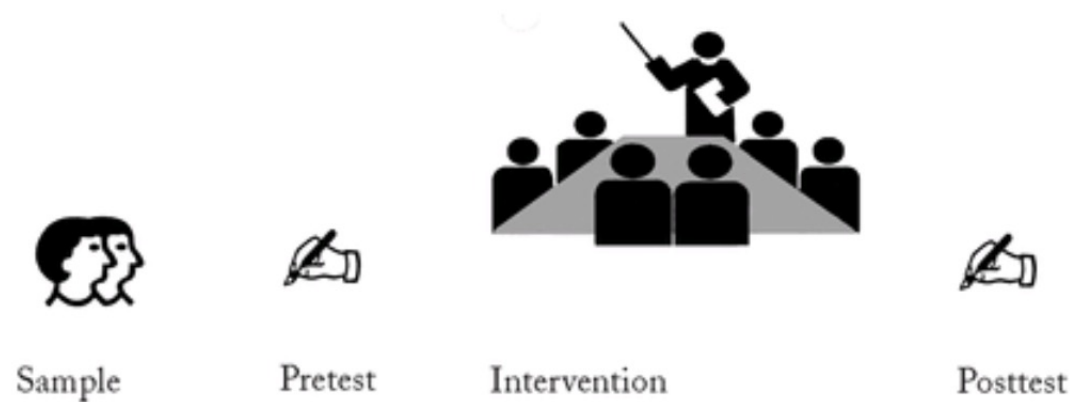
ILLUSTRATION 6.3 One-Group Pretest-Posttest Design

Source: Russ-Eft and Preskill, *Evaluation in Organizations*

Pre-Post

Advantages: Great for tracking participants

- Assessments
- Material conditions

Drawbacks: Participants might rate themselves highly on skills at the beginning, because they don't know what they don't know.

Pre-Post

Change in attitudes or outlook
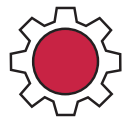
- [Child Hope survey pre and post](#)

Change in knowledge

- [Enlace *Relaciones Saludables* test](#)

Change in family functioning

- [Enlace PSI](#)

Change in participation in government support programs

- Participation Medicaid, SNAP, TANF

POST

Questions About Your Goals

Directions: The six sentences below describe how children think about themselves and how they do things in general. Read each sentence carefully. For each sentence, please think about how you are in most situations. Place a check ( ) inside the box that describes YOU the best.

|	😊	😐	😞
1. I think I'm doing pretty good.	✓		
2. I know what to do when I need something (hungry, cold, need a hug...)			✓
3. I feel I'm doing just as good as my classmates.	✓		
4. When I have a problem I can think of things to do to take care of the problem.		✓	
5. I think the things I do now will help me later when I'm older.	✓		
6. Even when others want to quit, I know that I can find ways to solve the problem.			✓

3/25/2013

Figure 1. Percent Scoring Correctly on Pre-and Post Questions, by Theme
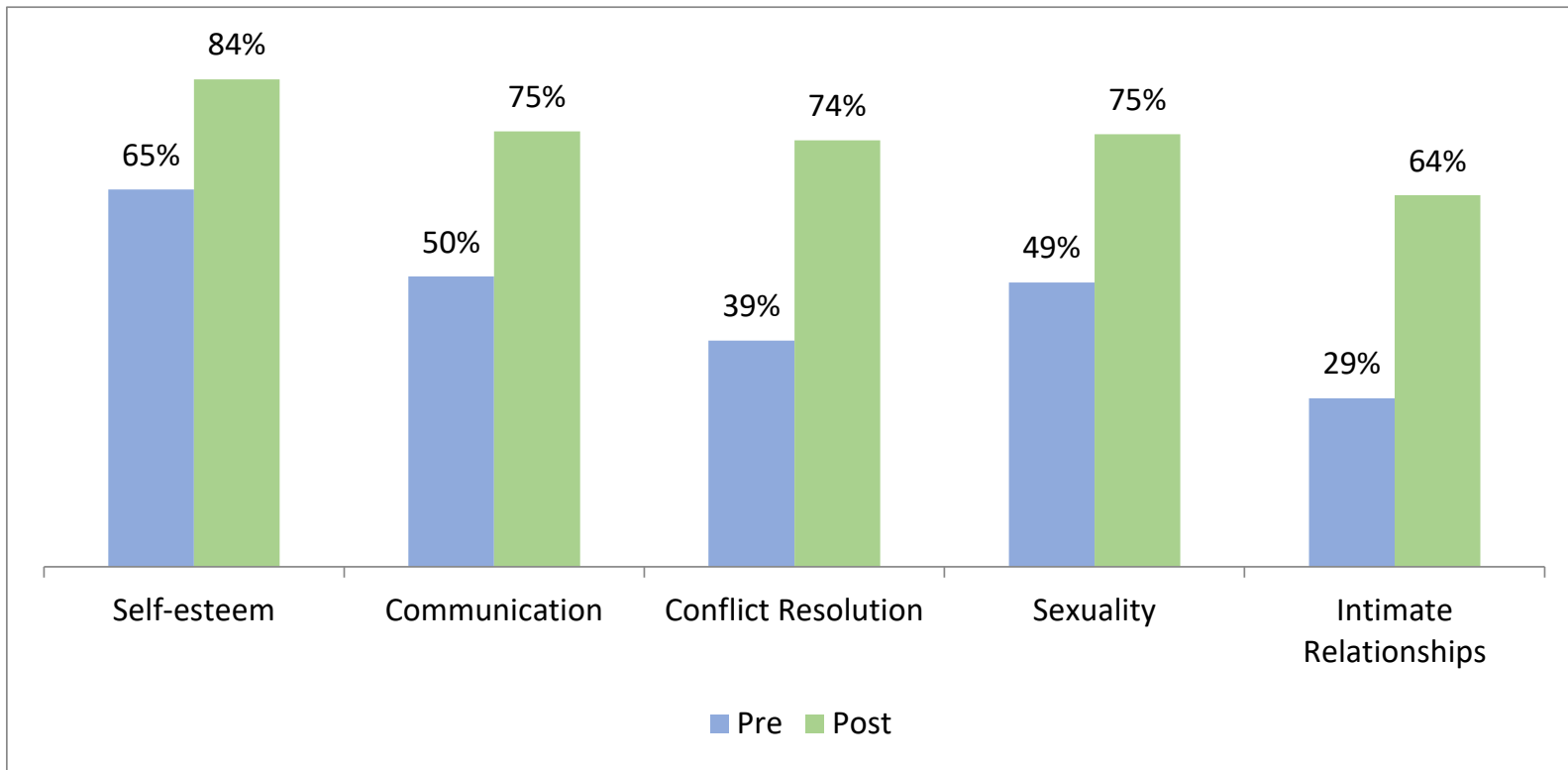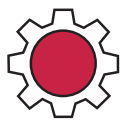

Note: Data collected through pre- and post- tests for 139 Relaciones Saludables students for nine semesters from year to year.

Figure 3. Parental Stress Index Surveys Show Parents' Stress Level Percentiles Declined Over Time in the Family Program
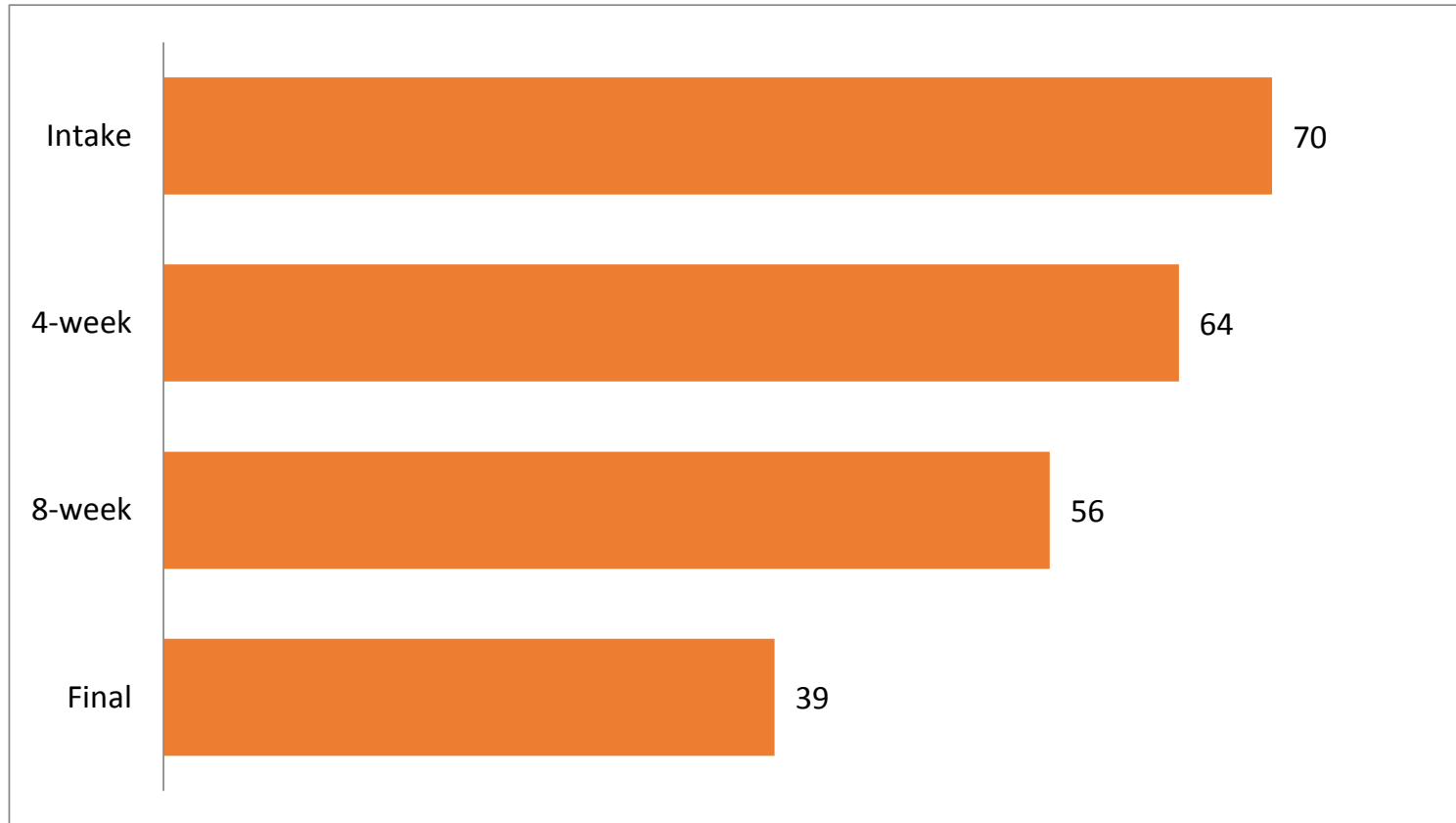
Note: Data represent 120 survey responses for 30 unique participants. Data are from mid-2010's to 2017.

Questions?

3. Treatment vs. Control group

Class drug trial: new medication vs. sugar pill (placebo)

Covid vaccine vs. saline

- Neither group knows if they got the treatment.

Randomly assigned to treatment and control

- In prescription drug trials

- In social programs—you want to randomly assign people who signed up for the program. That's because those who volunteer for a program may be quite different from those who don't.

  - Example: charter school vs. traditional school. Charter requires more effort on the part of the parent and that effort makes a different in child's education (not the charter school).

  - For programs that have a lottery, you can compare enrollees with those who didn't get in

Be open to possibility of identifying a control group

Even if not random assignment, is there a group you can't serve because of geography or some other characteristic not related to need for program?

Questions?

Eval^2* Data Collection. . .

For our fellowship program, where students partner with organizations to build evaluation capacity from August through May

1. Pre-post student skills survey (pre-post)
2. Student focus group (retrospective)
3. One-on-one interviews with partners (retrospective)

* Evaluation of the Eval Lab

http://evallab.unm.edu/learning-center/evaluation-of-the-evaluation-lab.html

Brainstorm evaluation design options

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Are parents using new skills in an effective way?	Currently in use: **Protective Factors Survey** Other options: **Parents write a letter with examples.** **Staff observations.**	We could integrate a reflection letter into our parenting skills program. Staff could evaluate parenting skills by observing parent/ child interactions and using the rubric we developed.	**Letter is retrospective.** **Observation could be pre-post.**

Options for evaluation design

- Retrospective
- Pre-Post
- Control group

What's next

2:35-3:05pm   Evaluation design (orgs)

3:05-3:20pm   BREAK

3:20-3:50pm   Share work (small groups with facilitator)

3:50-4:20pm   Debrief

4:20-4:50pm   Optional: continue data collection & evaluation design (orgs)

4:50-5:00pm   Close / Survey