

Testing Methodologies to Measure Participant Outcomes

Techniques to measure participant/client progress

Baseline Data

- Measure the condition of a community or participant before the intervention
- Use as a comparison point for data captured at various intervals in program implementation to measure the effect your program is having

Baseline Data Examples

Objective	Outcome Data Measured	Baseline Data for Comparison
Reduced justice system involvement for participants	Number of arrests a participant has one year after exiting the program	Number of arrests each participant had in the year prior to participating in the program
Increased participant knowledge of non-violent conflict resolution strategies	Knowledge of conflict resolution strategies upon program exit	Knowledge of conflict resolution strategies upon entering the program
Reduced number of neighborhood gang-related incidents	Annual number of neighborhood gang-related incidents	Average annual number of neighborhood gang-related incidents based on five years before program implementation

Pre-Test/Post-Tests

- Administered to participants before an intervention (program) & again after a predetermined length of time (intermittent, end of program, post-discharge)
- Use the same instrument (e.g., survey, validated tool, assessment, questionnaire) before and after the intervention so you are able to compare responses

Pre-/Post-Tests Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Can provide a reasonable estimate of the post-intervention change compared to post-test alone • Provides multiple data points— such as entry, midpoint, & exit—that can also be used to inform program services in some cases • Better when measuring factual knowledge or skill sets rather than participant perceptions of change • More accurate for measuring behavior recall due to minimal time between behavior & test 	<ul style="list-style-type: none"> • Can be difficult to create instruments that assess factual knowledge rather than perceptions of knowledge • Requires a minimum of two times to administer the instrument & requires matching of data, which can be a higher burden for program staff & participants & limits anonymity • For some programs, it may be difficult to collect data from participants until a rapport is established • Requires participants to be present at both program entry & exit to collect pre & post tests • Response shift bias may lead to measurement error (i.e., responding lower on the post-test responses after learning they did not know as much as they initially thought)

Retrospective Pre-Post

- Tool is administered just once at the end of the program
- Respondents are asked to assess knowledge & behaviors at two points in time (before and after the program)

Retrospective Pre/Post Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • The easiest & shortest survey design to implement • Only requires one administration point & does not require data matching • Can use to compare outcomes across multiple versions of the same intervention 	<ul style="list-style-type: none"> • Difficult to compare knowledge, attitudes, behaviors for before the program, making it hard to gauge program effect, especially if no baseline data were collected through another means

Note. This handout was adapted from the following source:

Should I conduct a pre- and post-test? Just a post-test? A retrospective post-then-pre? How do I decide? https://www.ksre.k-state.edu/employee_resources/programming/evaluation/documents/Comparing%20Survey%20Designs.pdf

Capturing change: Comparing pretest-posttest and retrospective evaluation methods, by Jessica L. O'Leary & Glenn D. Israel. <https://edis.ifas.ufl.edu/publication/WC135>