

Moving Beyond Student Satisfaction:

Evaluating College Substance Use Prevention Programs

Amelia M. Arria, Ph.D

Professor and Director
Center on Young Adult Health and Development
Department of Behavioral and Community Health
University of Maryland School of Public Health
aarria@umd.edu

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Moving beyond Student Satisfaction



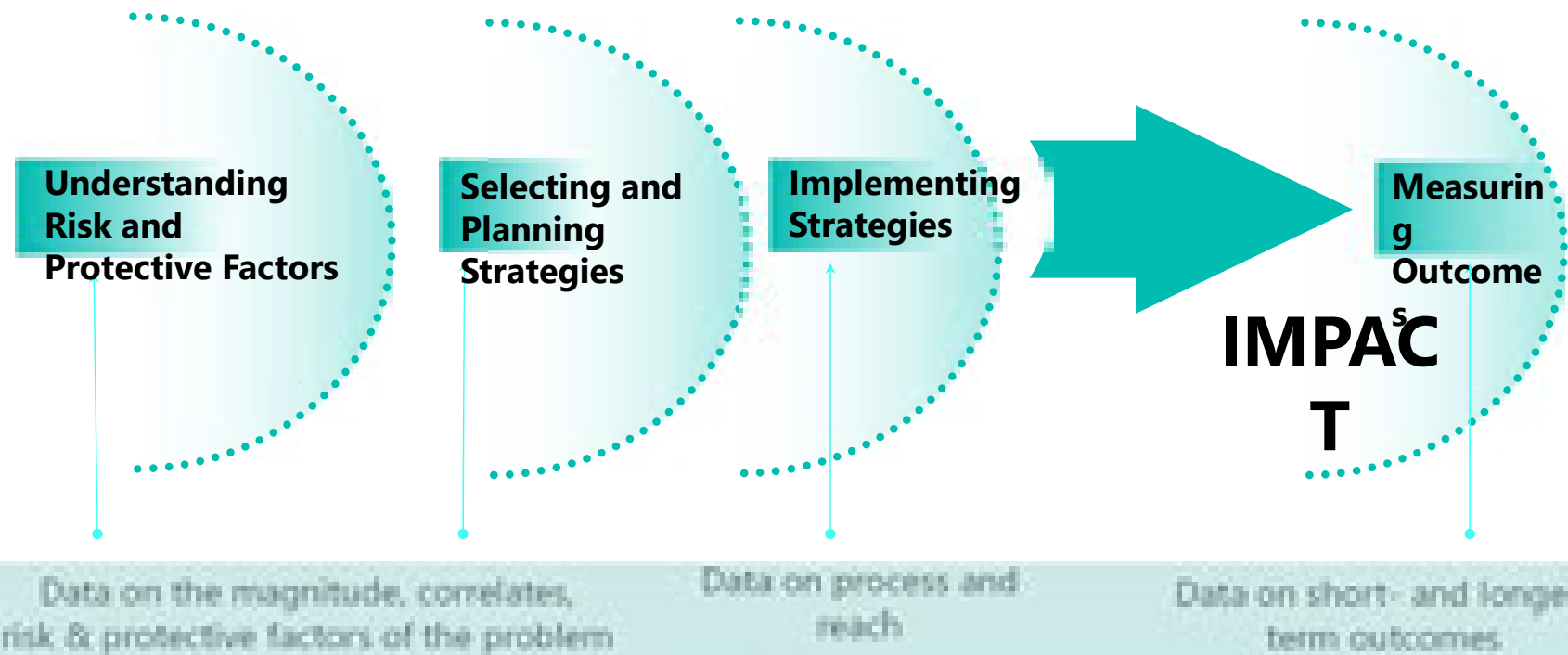
Satisfaction

Do people like the activity?

Are they having fun?

*If they are engaged, and really like the activity,
it must be impactful, right?*

Using Prevention Science to Impact Outcomes



*Influencing student decisions and changing behavior
requires both environmental-level and individual-level actions*

Environmental Strategies

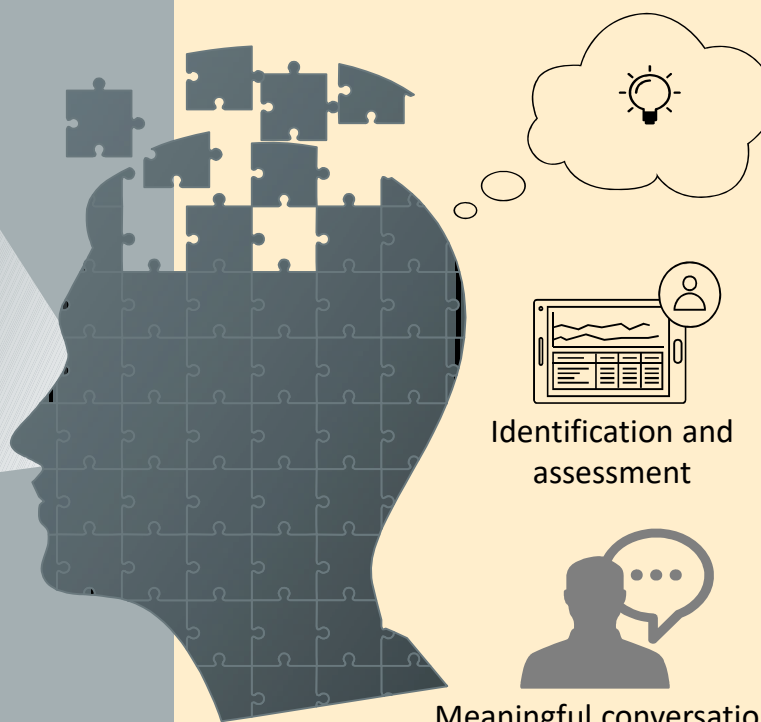
Changing what is perceived and seen

- Policies and their enforcement
- Advertising & Promotion

Changing what is available and accessible

- Campus social environments
- Community social environments
- Community retail environments

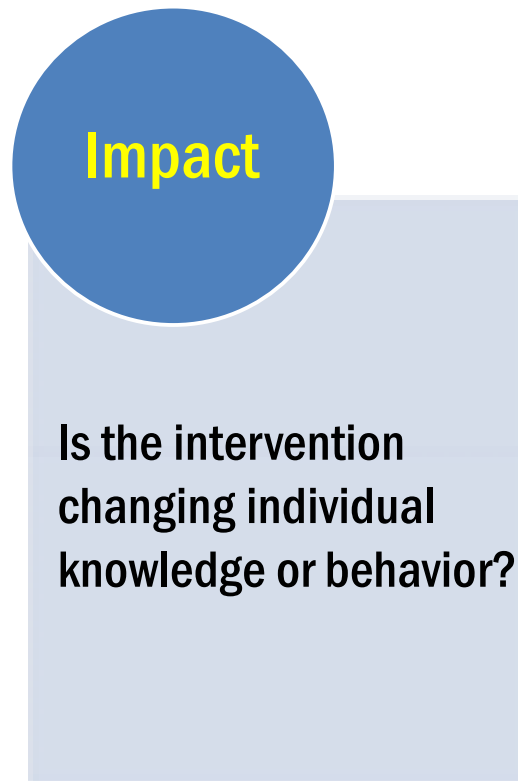
Individual-level approaches



Identification and
assessment

Meaningful conversations

Purposes of Evaluation



Purposes of Evaluation

Intervention Development

Are all of the components of the intervention or activity necessary?

Is the way that the intervention is delivered the most efficient?

Process

Are you reaching enough people with the intervention or activity?

How much of the intervention is being “absorbed”?

Are you reaching the kinds of people you would like to reach?

Impact

Is the intervention changing individual knowledge or behavior?

Purposes of Evaluation

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Impact

Is the intervention changing individual knowledge or behavior?

Rapid-cycle evaluation should be considered as a way of fine-tuning an activity.

- This process should only be applied to ideas that are **BRAND NEW**.
- If you are using an evidence-based intervention (e.g., with a manual) you have to deliver it with “fidelity” in order to expect the same kind of results.

1. Think about the components of an activity... break it into pieces. Let's pretend there are three pieces.
2. For five days, conduct the activity with all three pieces.
3. Examine carefully what happens.
4. The next five days, conduct the activity slightly differently (e.g., a piece missing, a shorter time frame, two people leading an activity instead of one).
5. Examine carefully what happens.
6. What did you learn?

Example: **Making the perfect chocolate chip cookie**



Rapid cycle evaluation: Modification of Cookie Recipe



First cycle: No changes to recipe.

Taste, have family members rate cookie.

Second cycle: Add extra egg, no other changes

Taste, survey if change was an improvement

Third cycle: Add 2 T peanut butter, no other changes

Taste, survey if change was an improvement

Fourth cycle: Add extra egg and 2 T peanut butter

You be the judge....



Example #1:
Utilizing QR codes

Program Goals

- 1) To increase awareness of campus alcohol policies**
- 2) To reduce alcohol-related policy violations**

*How could you apply rapid cycle evaluation
techniques to fine tune this new idea?*

Put your answers in the chat box

Purposes of Evaluation

Impact

Is the intervention changing individual knowledge or behavior?

Process

Are you reaching enough people with the intervention or activity?

Are you reaching the kinds of people you would like to reach?

What are the potential barriers to implementing a strategy?

How can the success story about the intervention be told?

Intervention Improvement

Are all of the components of the intervention or activity necessary?

Is the way that the intervention is delivered the most efficient? The most impactful?

Designing an Evaluation to Answer Questions about Process

Key Process Evaluation Measures

Reach: the extent to which the program reached its intended audience; also called coverage.

Satisfaction: the degree to which participants receive what they expect to receive and the extent to which their expectations are met with regard to how they are treated.

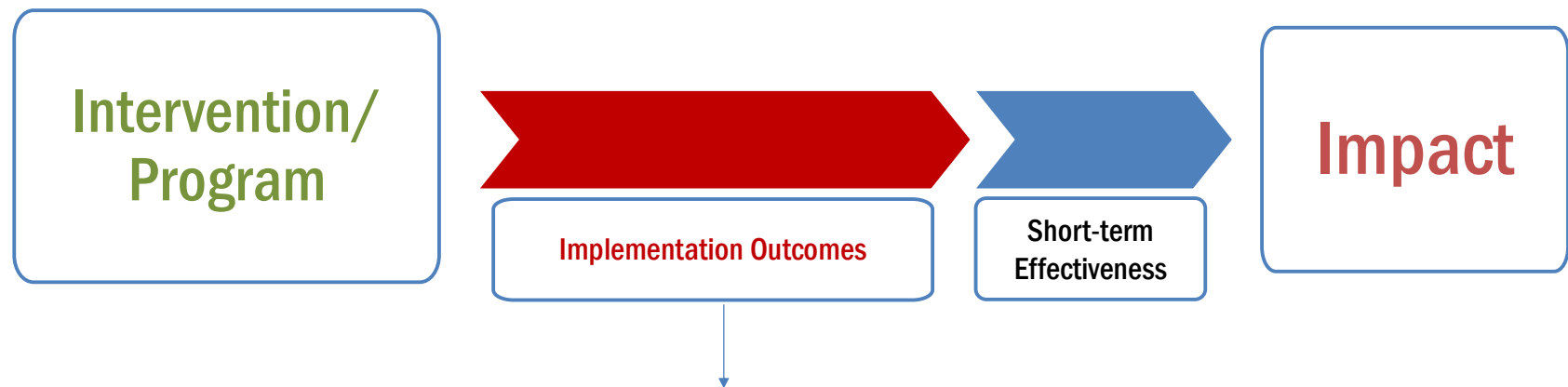
Service completion: the degree to which program participants completed the program.

Dose: The level of intensity of the intervention received by participants.

Fidelity: The degree to which the intervention was implemented the way it was intended.

Why is process evaluation so important?

1. Because variations in the way the program is delivered can have significant implications on program effectiveness.
2. Because others will need to replicate the intervention if it is effective, and you have to tell them how you did it.
3. Because how an intervention is implemented is the mechanism (or active ingredient) of impacts!



Process evaluation describes all aspects of program implementation AND assesses the extent to which the program was delivered as intended.

Designing an Evaluation to Answer Questions about Process

Data are best collected in real-time, by tallying activities during implementation.

- Use a checklist to measure which components of the program were delivered.
- Use a sign-in sheet to measure how many people attended the activity.
- Use a stopwatch or clock to measure the time it took to deliver each component of the activity.

Data can be collected retrospectively too

- Program Satisfaction can be measured with a post-implementation survey.
- Key Informant interviews can be conducted with participants to measure their engagement.

KEEP COMPUTERIZED RECORDS!!!



Example #2:
**Resident Assistant
Training**



Program Goals

- 1) To educate RAs about warning signs for substance use**
- 2) To increase the likelihood that RAs will make a referral for students of concern**

Name an important thing to collect during the implementation of this training to evaluate process.

Put your answers in the chat box

Designing an Evaluation to Answer Questions about Process

Key Process Evaluation Measures

Reach: the extent to which the program reached its intended audience; also called coverage.

Satisfaction: the degree to which participants receive what they expect to receive and the extent to which their expectations are met with regard to how they are treated.

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Purposes of Evaluation

Intervention Improvement

Are all of the components of the intervention or activity necessary?

Is the way that the intervention is delivered the most efficient? The most impactful?

Reach

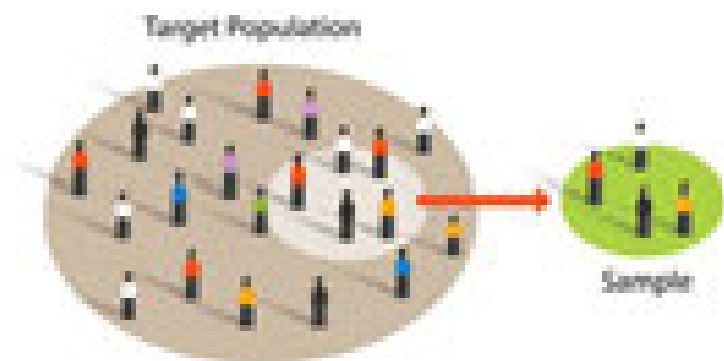
Are you reaching enough people with the intervention or activity?

Are you reaching the kinds of people you would like to reach?

Impact

Is the intervention changing individual knowledge or behavior?

Participant-level change is different than population-level change



- Programs or interventions are often directed at a sample of people from the population.
- The effect of a program or intervention is measured in a sample of people who received it.
- Public health interventions that use a “population-based approach” target the broader population. Policies are a good example of such an intervention and thus are considered to be more impactful than individual-level interventions.
- Our annual student survey (MD-CAS) measures population-level change

Policy-level change vs. Individual interventions: Mandating calorie counts



Cal	
6" sub	
560	Meatball Marinara
450	Italian B.M.T.
480	Spicy Italian
400	Prime Rib
380	Subway Melt
	Season Ranch

Specifying your Evaluation Goals

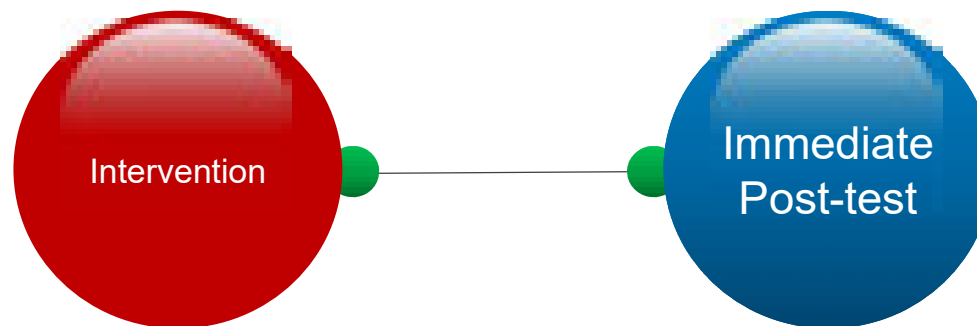
Very early on, before implementing any sort of activity ask yourself:

What do I want to achieve from the activity?

- Can those achievements be quantified? How can they be measured?
- Think about what you want to happen immediately after, in the short-term, and in the long-term

Designing an Evaluation to Answer Questions about Impact

Single group post-only



Did the intervention participants increase their knowledge immediately following the intervention?

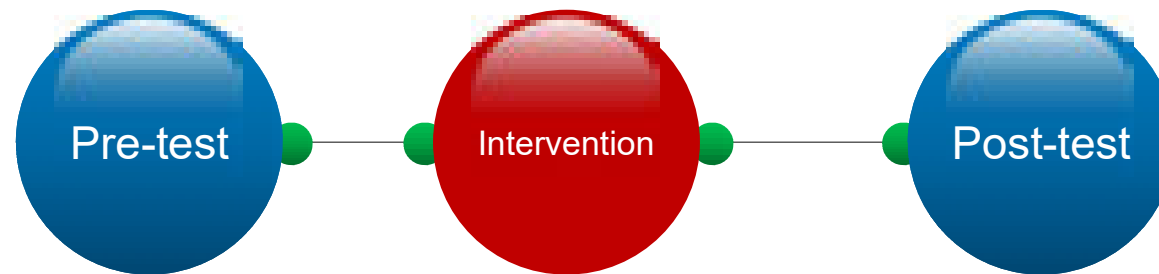
Could you answer this question with this design?
Place your answer (yes/no) in the chat box.

CORRECT ANSWER: NO

Why? Because you don't know what their knowledge level was prior to delivering the intervention.

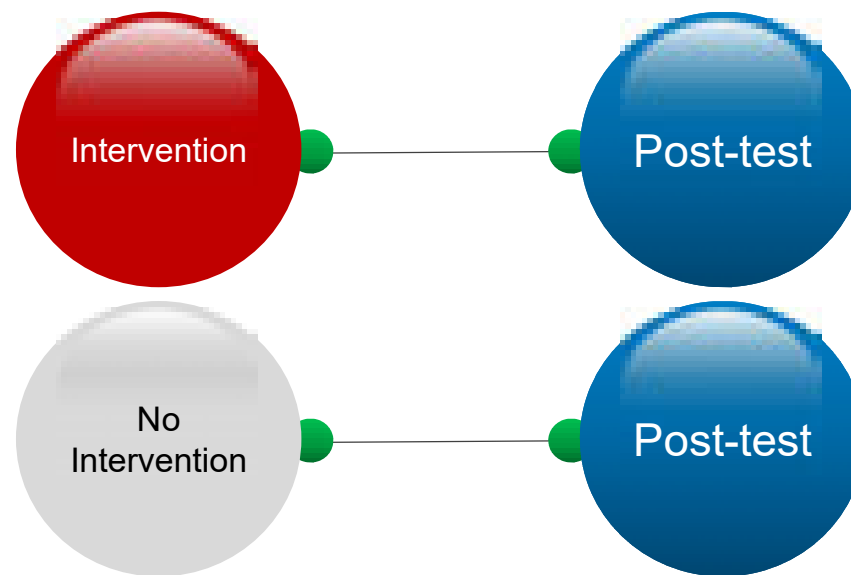
You need a different design to answer that particular question.

Single group pre- and post-test



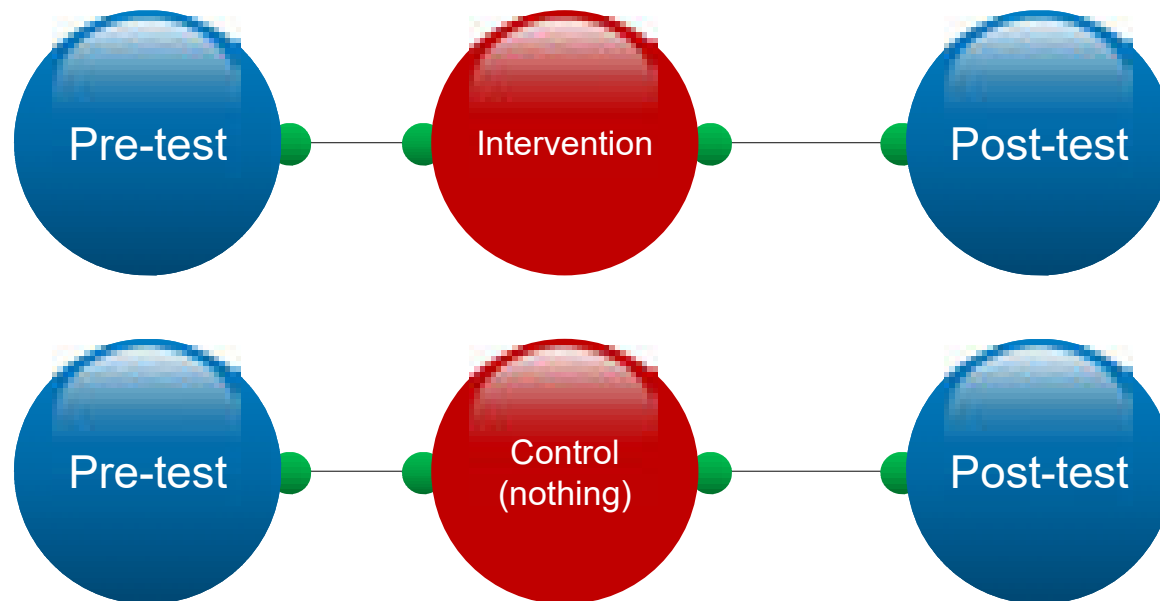
- Were changes observed among intervention participants immediately following the intervention?
- Did some people learn more from the intervention than others?
- What were some possible reasons why the intervention led to increases in knowledge?

Two group post-only



What questions can you answer with this design?

Two group randomized pre- and post-test

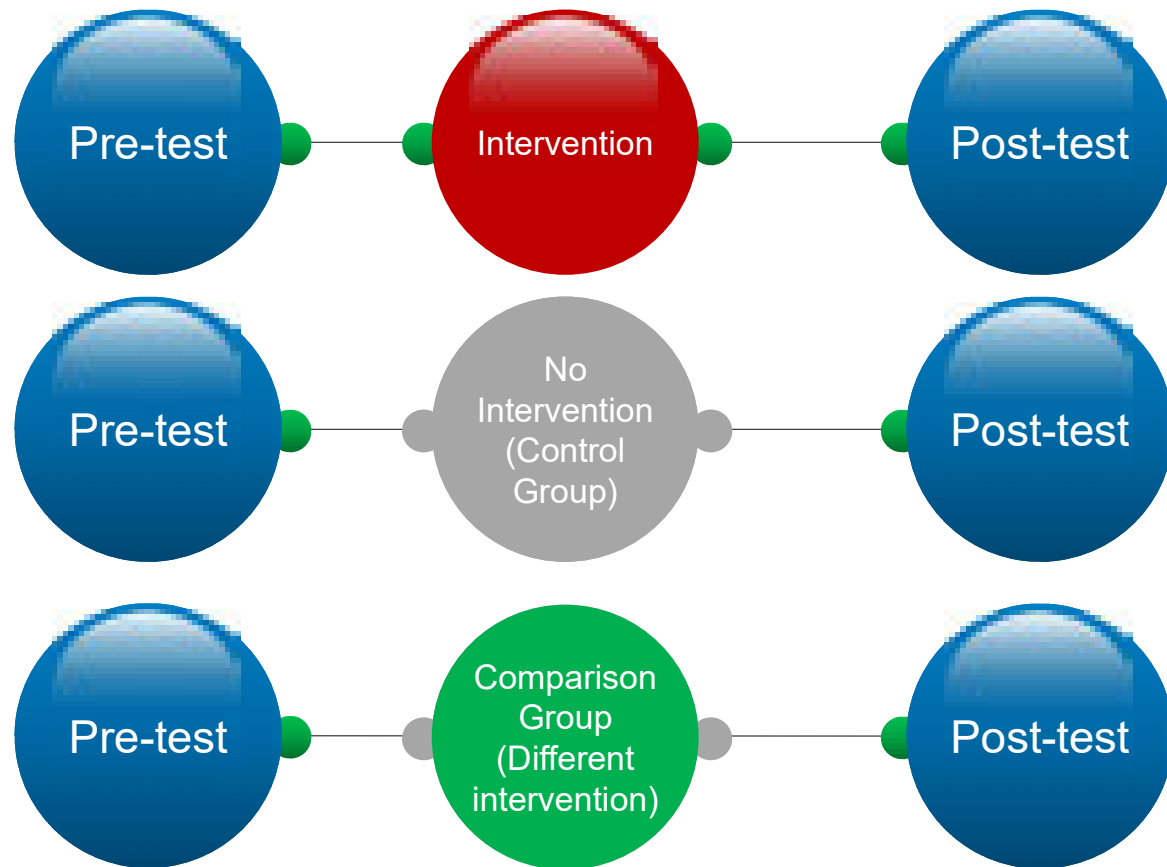


Evaluation of Impact (Longer-term changes in outcome)

- How much change in knowledge was observed in the target behavior after receiving the intervention?
- Did intervention participants differ from a group that did not receive the intervention on knowledge, attitudes, and behaviors?
- Was the intervention the reason for the change? Only possible to understand with randomized designs, where another group didn't get the intervention.
- What were some possible reasons why the intervention was impactful?

Multiple group randomized pre- and post-test

What components of the intervention were associated with the greatest change?



Let's go back to the **perfect chocolate chip cookie**





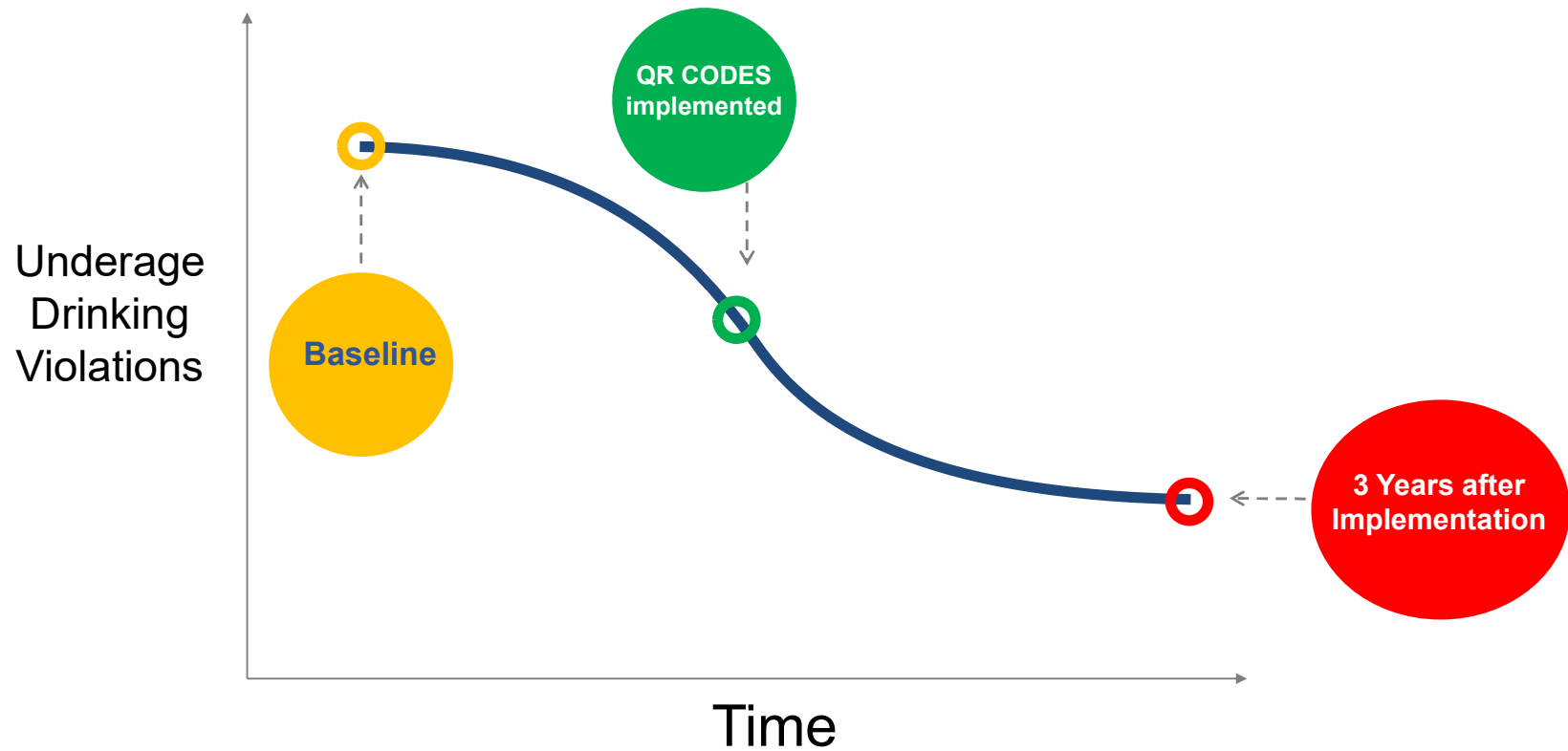
Example #1:
Utilizing QR codes

Program Goals

- 1) To increase awareness of campus alcohol policies**
- 2) To reduce alcohol-related policy violations**

OH NO... we implemented this policy around our entire campus, so we don't have a control group...

If you don't have a control group...

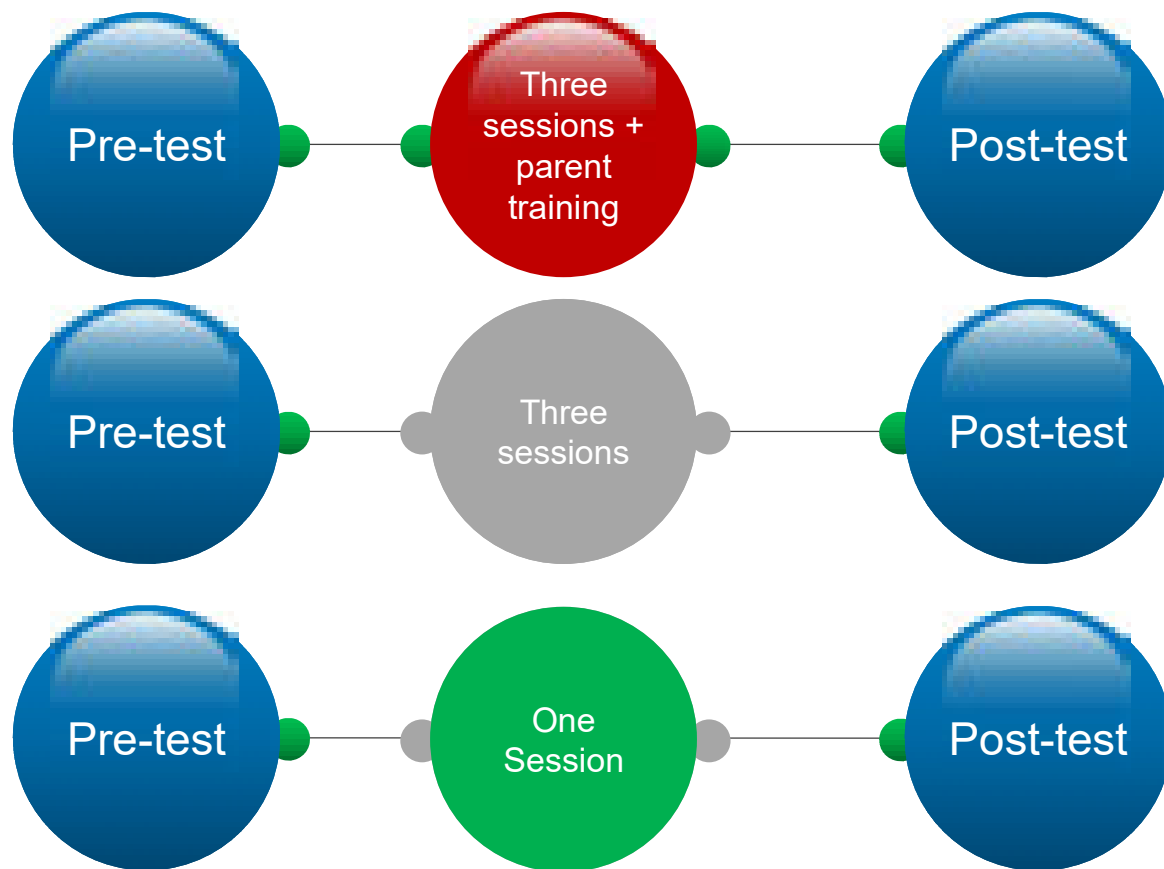


Here's another trick...

Vary the “dose” of the intervention to see if the individuals exposed to **more of the intervention** experience a greater change



Multiple group randomized pre- and post-test



Timing of post-assessments

- Were changes observed among intervention participants immediately following the intervention?
- What about a month after? What about a year after?
- Were there decays in positive change in knowledge, attitudes and behaviors months and years after exposure to the intervention?

The Value of Different Kinds of Data

- **Anecdotal Data** – stories, events...can provides clues that need to be confirmed with more systematic data collection
- **Qualitative Data** – narrative data collected in a systematic way (e.g., focus groups)
- **Quantitative Data from Surveys** – numerical data collected in a systematic way from conducting a survey (either online or in person)
- **Quantitative Data from Administrative Records** – numerical data collected from administrative agencies; be aware of “tip of the iceberg” issue

Change does not equal improvement

- Evaluations are focused on measuring change, but change can be good or not so good.
- Be as specific as possible when you think about your goals – do you want to increase something? decrease something?
- How much of a change do you want? How much of a change can you expect?
- Think about timing. How long will it take to achieve the change you want to see?



Things change because of a lot of other things besides your program or intervention.

- We all love to believe that what we are doing is making a positive change. But we have to believe in data.
- Things change for a lot of reasons. Our program might be responsible, but it also might not be responsible.
- Can you measure what else might be accounting for the change you observe?
- The use of a control or a comparison group in an evaluation helps you understand if it is your program, or something else, that is

It's important to know WHO is changing.

What kinds of people were more likely to change as a result of the intervention?

*What subgroups are of interest to you when evaluating a
substance use prevention program or policy?*

Why?

Summary

- Rapid cycle evaluation can help in the early stages of intervention development.
- Process evaluation can provide important information about improving the implementation of an intervention.
- Process evaluation measures include the number of people you reached by the intervention, how much of the intervention they received, and program satisfaction.
- Specifying exactly what you hope to achieve by your evaluation is critically important.
- Having both a pre- and a post-assessment helps you measure change.
- Think about timing of post-assessments, and try to include more than just an immediate post-assessment to evaluate longer-term change.
- Consider the inclusion of a control or comparison group in your evaluation design.
- Remember that there are many reasons that things change besides your intervention.
- Eat more chocolate chip cookies (but not too many).

Specifying your Goals

Examples...

Proposed Activity	My goal (What do I want to achieve?)	How can I quantify my achievement?	Measurement Method (How can I measure it?)
Setting up a table in the student union to distribute informational resources	<ul style="list-style-type: none"> • Distribute information • Increase awareness of a resource • Increase use of the resource 	<ul style="list-style-type: none"> • Number of flyers distributed • % increase in the students who are aware of the resource • % increase in use of the resource 	<ul style="list-style-type: none"> • Count of flyers before and after event • Annual student survey
Screening for binge drinking at the health center	<ul style="list-style-type: none"> • Identify student binge drinkers to refer them to an intervention 	<ul style="list-style-type: none"> • % of students who were referred among those who screened positive 	<ul style="list-style-type: none"> • Computerized health record
Bystander intervention training to reduce sexual assault at a fraternity	<ul style="list-style-type: none"> • Increase knowledge of when intervention is appropriate • Increase self-efficacy in responding 	<ul style="list-style-type: none"> • Increase in knowledge test scores from baseline to 1 month after the training • Increase in a measure of self-efficacy 	<ul style="list-style-type: none"> • Pre- post student surveys • Student surveys on sexual assault experiences