

## EVALUATION BRIEF

### Utilizing a Comparison Group in Evaluation

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#### What is a comparison group?

Utilizing a comparison group in an evaluation involves the identification of a group of individuals assessed as being “comparable” to individuals in a participant group, but who have not been exposed to the services or interventions offered to program participants. A comparison group can be identified within the program’s agency (e.g., similar individuals who could have benefited from the program) or from another agency or community that does not have the service intervention available. Typically, demographic characteristics and other key variables are examined, such as presenting conditions, to establish the comparability of the intervention and comparison groups. A comparison group may be identified before, during, or after the start of an intervention, and can be created at either the client level (i.e., individuals in the participant group are directly matched and compared with comparison individuals) or the aggregate level (i.e., outcomes for the participant group as a whole are compared with outcomes for the comparison group as a whole).

#### Why are comparison groups important?

Your evaluation design must allow you to answer two basic questions:

- 1) Did program participants demonstrate changes in knowledge, attitudes, behaviors, or awareness?
- 2) Were the changes the result of the program’s interventions?

A major advantage to using a comparison group design is the ability to tease out the effects of your program’s interventions in relation to expected outcomes. For example, without the use of a comparison group, it is difficult to demonstrate that any changes in your participants took place as a result of your intervention. Changes for the treatment group may be a result of some other reason (e.g. other contextual factors or perhaps simply the passage of time).

Example: If your intervention was parenting classes and you showed that your treatment group improved in parenting skills over time, it could be argued that parenting skills increased simply as a function of parenting longer and having more practice. But, if a comparison group did not show similar changes, you are able to say with greater confidence that your intervention had an impact.

Using a pre-post design (where participants are assessed prior to the intervention and after the implementation using the same method) with a comparison group allows you to demonstrate the effectiveness of your intervention by showing that change took place for the

treatment group but not for the comparison group (or that the level of change was greater for the intervention group than for the comparison group).

### How do I identify a comparison group?

Your comparison group should be comparable to your treatment group in all characteristics that may influence outcomes. For instance, groups should be comparable on demographic characteristics as well as other characteristics that may play a role in successful outcomes (e.g. clinical characteristics, level of service needs, etc). Therefore, you need to collect data from both groups at baseline to try and control for potential differences as part of your statistical analyses.

Example (continued from above): If you are comparing the effects of a parent training program between your treatment group that is receiving the training and your comparison group that is not (trying to demonstrate the parent training increases parenting skills), you would want to make sure that the parents were comparable not only in demographics but in other characteristics that are most likely related to the outcomes (e.g. baseline level of service needs or parenting skills).

Comparison groups must be available for assessment (data collection) during the timeframe of your evaluation.

You will need to specify strategies for encouraging and motivating non-treatment or comparison group members to take part in the evaluation. For example, you can put them on a waitlist and guarantee them the treatment after the evaluation. Another option is to offer comparison group members incentives to participate if resources are available.

Examples of possible comparison groups include:

- 1) a similar target population in your own agency that is not enrolled in the treatment program;
- 2) a similar target population from another agency in your community that is not implementing the intervention being evaluated; or
- 3) a similar target population in another county agency that is not implementing your program's intervention.

Utilizing a comparison group from another agency takes careful planning and collaboration. Consider developing an interagency agreement that specifies the data to be made available, the size of the control group, and other pertinent characteristics of the control group.

### What if a comparison group is not available for the evaluation?

It may be difficult to identify a comparison group due to the following:

- *Logistical issues.* Sometimes a comparison group is not available.
- *Ethical issues.* Sometimes programs want to serve all clients with the same treatment or another agency is not willing to allow you access to their clients.
- *Motivation.* It can be difficult to enlist participants as only a comparison group if they are seeking the specific services or benefits available in the treatment group.



If you have exhausted all possibilities for identifying a comparison group, there are other designs, although less rigorous, that allow you to answer the questions we just discussed as central to your evaluation:

- 1) Did program participants demonstrate changes in knowledge, attitudes, behaviors, or awareness?
- 2) Were the changes the result of the program's interventions?

For example, you can use a pre-post design without a comparison group and still show that change took place for your treatment group. This *along with a program model*, which clearly articulates your theory of change (i.e. the links between your program activities and your expected outcomes), *and good process data* will allow you to trace the outcomes (changes in your treatment group) back to your intervention.

It is important to remember, however, that a pre-post design without a comparison group is a weaker design than a pre-post design with a comparison group. This is because a comparison group gives you the opportunity to provide a stronger link between your intervention and outcomes by showing that change did not take place with a comparable group who did not receive the same intervention. This type of evidence allows you to clearly show that change in the treatment group took place due to the intervention rather than other contextual factors or simply the passage of time (e.g. parenting skills increased on their own simply as a result of parenting longer).

Source: Adapted from Kaye, E. (2003). Technical Assistance on Evaluation. Presentation at the Children's Bureau Annual Grantees Meeting. March 2003. Washington, D.C.