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Quick Tips

When to Use the Retrospective Post-then-Pre Design

The retrospective post-then-pre design has become a popular way to measure change. To be effective, we need to know when it is appropriate to use this design. The retrospective post-then-pre design is appropriate when you need to do one or more of the following:

- **Reduce response-shift bias.** Response shift bias refers to a change in the way a respondent understands a question between the pre and post program evaluation. It occurs when a participant answers a question from a different mindset on the post-program question than he or she used on the pre-program question. This creates a *response shift*. Response-shift bias is likely to be present in educational programs because they are designed to improve learners' knowledge, skill, attitude, and behavior. (Howard, 1980). The retrospective post-then-pre design has been shown to reduce response shift (Howard, 1980).
- **Measure learners' perceptions of change .** The retrospective post-then-pre design measures learners' perceptions of their knowledge, skill, attitudes, and/or behavior. It does not measure *actual* knowledge, skill, or behavior.
- **Compare pre and post data from each learner.** The retrospective post-then-pre design provides information from two points in time to make comparisons possible. If you do not have and cannot obtain information from participants about their pre-program knowledge, skill, attitude, behavior, the retrospective post-then-pre design may fit your needs.

The retrospective post-then-pre question may not always be appropriate. Sometimes a simple post-program only question that clearly asks respondents to indicate whether they have changed as a result of the program may be more appropriate. For example, "As a result of this program, to what extent have you increased your knowledge about how to avoid cross-contamination when shopping, preparing and storing foods? "

Remember that using multiple data collection methods and/or information sources to assess change provide a more accurate assessment of your program's results. If possible, combine your questionnaire with another method, such as observation or interview, or collect information from other people.

Good evaluation requires choosing a design that is appropriate for your particular circumstances. When used appropriately, the retrospective post-then-pre design can be an important evaluation tool.

Reference:

Howard, G. S. (1980). Response-shift bias a problem in evaluating interventions with pre / post self-reports. *Evaluation Review* 4(1), 93-106.

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