DESIGN METHODS PART I

Types of group designs

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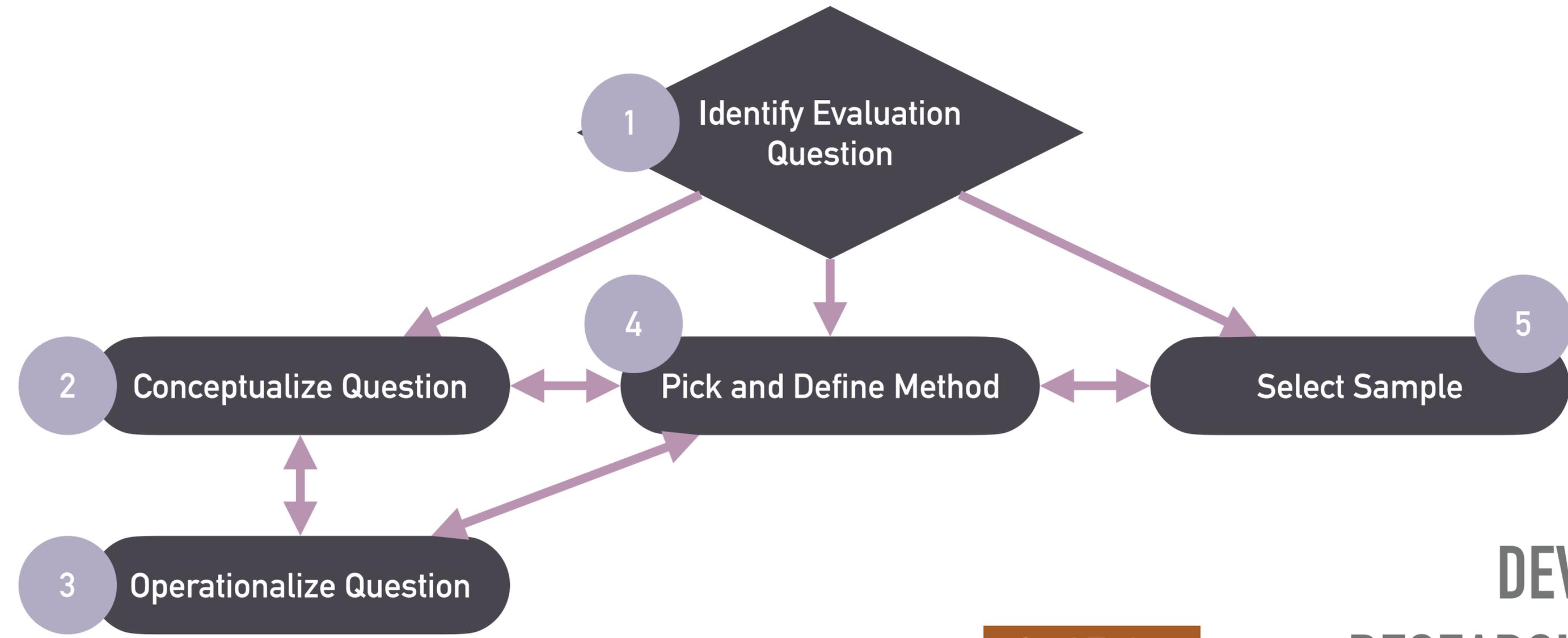at Heritage University

SOWK 460w Spring 2024

AGENDA

➤ Developing your research question

➤ Peer Review Logic Models

➤ Key components for evaluation methods

➤ Threats to validity

➤ Types of group designs

RESEARCH QUESTION

What do you want to know?

1 Identify Evaluation Question

2 Conceptualize Question

3 Operationalize Question

4 Pick and Define Method

5 Select Sample

First Five Steps in a Program Evaluation
(Kapp & Anderson, 2010)

DEVELOPING A RESEARCH QUESTION

Goal Today

You should have an **overarching question** you are trying to reach with your evaluation. You should also have 3 to 5 specific questions your evaluation is trying to answer

DEVELOPING A RESEARCH QUESTION

To Help You Develop Your Question Consider:

- **What is your topic?** i.e., burnout, how transitions happen, gaps in services, etc.

- **What is the context or location of your research?** i.e. DSHS, Domestic Violence, etc.

- **What do you want to achieve?** i.e. to discover, to describe, to change, to explore to explain, etc.

- **What is the nature of your question?** i.e., a what, where, how, when, or why question?

- **Are there potential relationships you want to explore?** i.e., impacts, increases, decreases, relationships, correlations, causes, etc.

DEVELOPING A RESEARCH QUESTION

Potential Question 1

Topic: _____

Context: _____

Goal: _____

Nature of Question: _____

Relationships: _____

Question: _____

Potential Question 2

Topic: _____

Context: _____

Goal: _____

Nature of Question: _____

Relationships: _____

Question: _____

Starting with the nature of the question – who, what, why, where, how, when – begin to piece together the answers generated in Step 1 until you feel comfortable with the eventual question or questions.

2

Suppose the problem you are interested in is increased viewing of pornography among high school students. The answers from Step 1 might lead to several questions:

example:

1

Topic: pornography
Context: high school
Goal: to explore prevalence of watching porn
Nature of your question: how much/ often
Relationship: N/A

Question: How prevalent is watching pornography among high school students?

2

Topic: pornography
Context: high school
Goal: to understand how porn changes sexual expectations
Nature of your question: how
Relationship: watching porn and expectations

Question: How does watching pornography change sexual expectations among high school students?

3

Topic: pornography
Context: high school
Goal: to understand education programmes in high school that address porn viewing
Nature of your question: what
Relationship: N/A.

Question: What education programmes have been shown to have a positive impact on the pornography viewing habits of high school students?

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DEVELOPING A RESEARCH QUESTION

To Help You Develop Your Question Consider:

DRAFT A QUESTION...

DEVELOPING A RESEARCH QUESTION

1. Rewrite your question and circle terms that could be ambiguous.

2. Go through and clarify those terms.

3. Then, redraft your question, bringing more clarity and description

LOGIC MODEL

Overview of Program

select
INTERACTIVE LOGIC MODEL PUZZLES

complete one as a group

- Seniors fall prevention
- Youth smoking cessation
- Teen parenting
- Community crime prevention

https://communitysolutions.ca/web/free-resources-menu-version/

EVALUATION RESOURCES
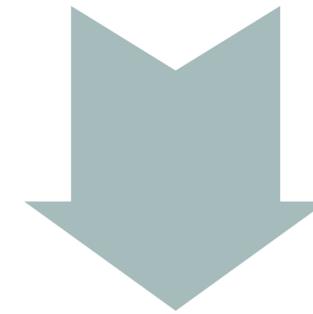
Logic Model Rubric for SOWK 460w

Description	Initial	Emerging	Developed	Highly Developed
Visual/Clarity	Unable to identify the components.	Able to identify 3 of the components.	Able to identify 4 of the components.	Able to identify all of the components. The chart is easy to read and visually appealing.
Resources	No identification of resources.	Limited or unclear identification of resources.	The majority of resources were identified.	Complete understanding of resources identified.
Staff Activities	Minimal to no description of staff services provided by the agency.	Seldom description of the staff services provided by the agency.	Partial description of most of the staff services provided by the agency.	A clear description of all staff services provided by the agency.
Program Processes	Minimal to no description of the intended service(s) of the agency.	Seldom a description of half of the intended service(s) of the agency.	Partial description of most of the intended service(s) of the agency.	Clear description of the intended service(s) of the agency.
Short-Term Outcomes	Limited or no data collected. Brief and unclear statements.	Some data was collected, but it is very brief with little detail.	Defines the expected change in the program.	Specifies the target audience, timeframe, and desired level of change.
Immediate Term Outcomes	Did not develop data collection or incomplete.	It shows some connection to activities but needs clarification.	Explains how the changes were implemented to the program's goals.	Identifies relevant data collection methods to track the progress of program evaluation.
Long-Term Outcomes	Vague or no data and outcomes identified.	The outcome has been identified but it is brief and unclear. The data is somewhat relevant to the outcome.	Describes new implementations and long-term outcome goals. Minor additions are needed to develop the logic model's long-term outcomes	Implementations and Long-term outcomes are identified and specified in depth under each category based on program needed change(s) at the agency.

PEER REVIEW LOGIC MODEL

Submit notes in the MyHeritage Forum

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SOWK 460w Spring 2024

EVALUATION DESIGN

Method for Collecting Data

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SOURCES OF INFORMATION

➤ Questionnaires, surveys, checklists

➤ Interviews

➤ Observations

➤ Focus groups

➤ Existing data (systematically gathered data, case files, treatment documentation, etc.)

➤ Controlled experiments

COMMON PITFALLS IN SURVEY QUESTIONS

Many of you are planning on using a survey as a part of your program evaluation. Working in your groups, spend time reviewing the CDC's Tip Sheet and talking about potential questions.

- Doublebarreled questions
- Introducing bias
- Balanced question and response
- Negative items

SURVEY QUESTIONS

https://www.cdc.gov/dhdsp/docs/constructing_survey_questions_tip_sheet.pdf
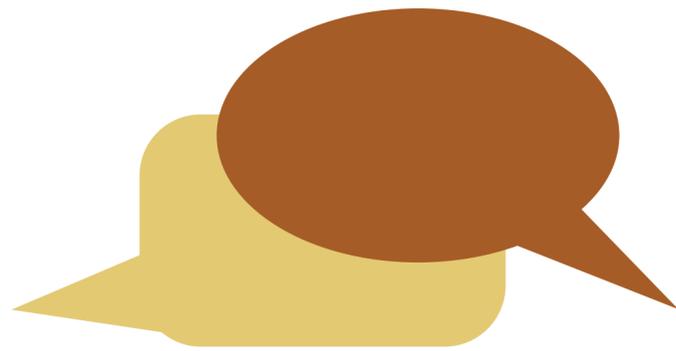
Qualitative Designs and Applications

Consumer Satisfaction

★★★★☆

4 out of 5 Stars

COMING LATER THIS SEMESTER...

OTHER DESIGN CHOICES
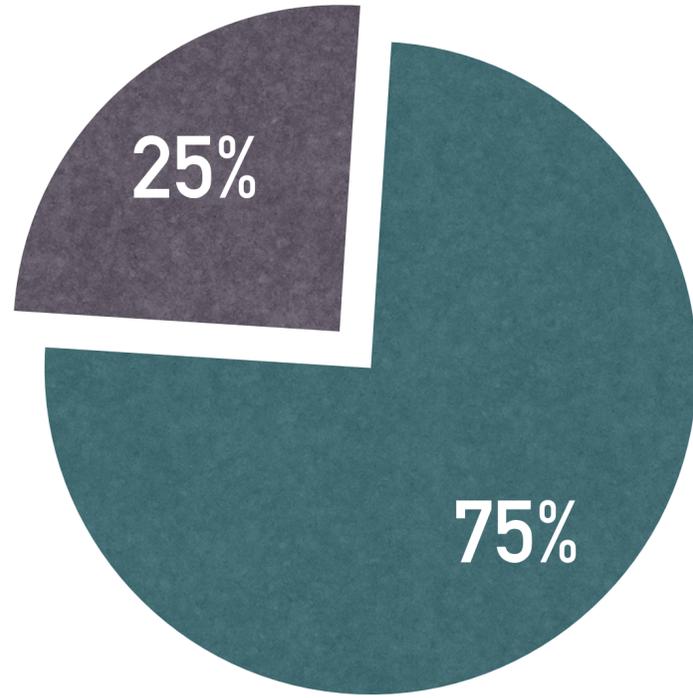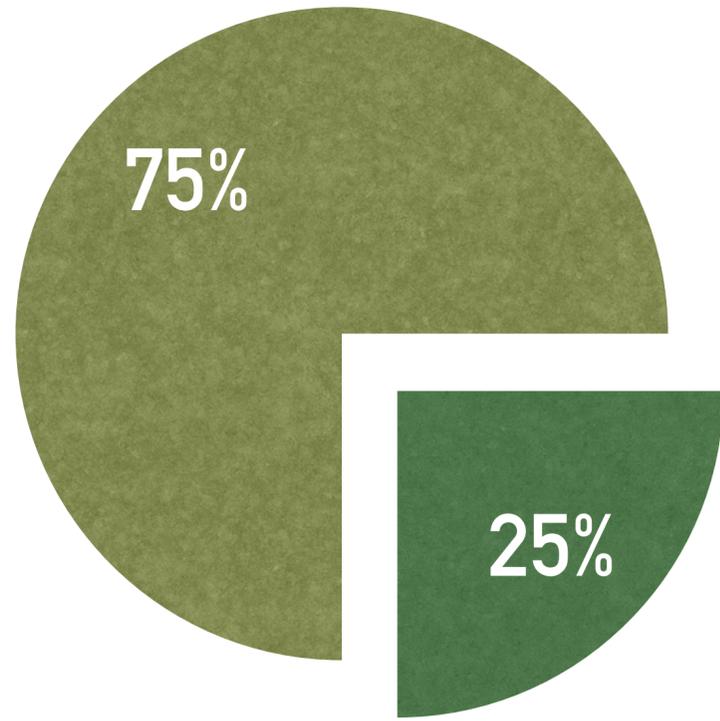
METHODS FOR EVALUATION

➤ Sample selection

➤ Data collection

➤ Analysis

➤ Reporting
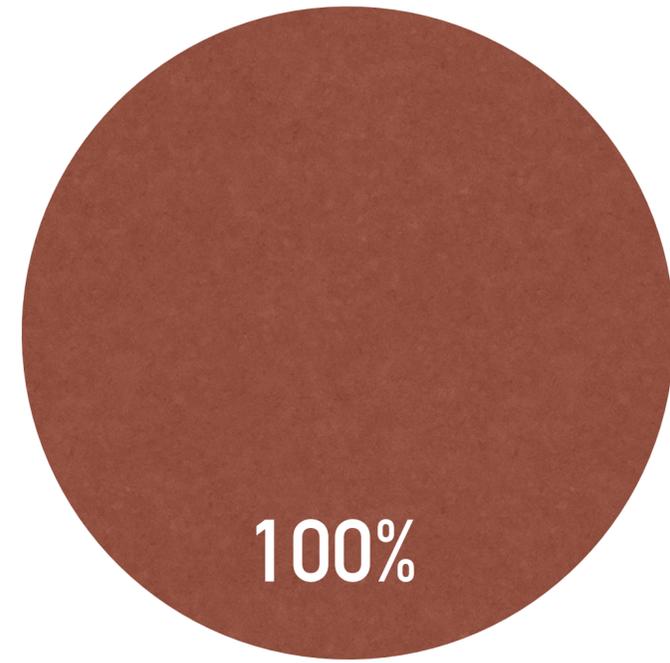
SAMPLING

Photo by Jen Theodore on Unsplash
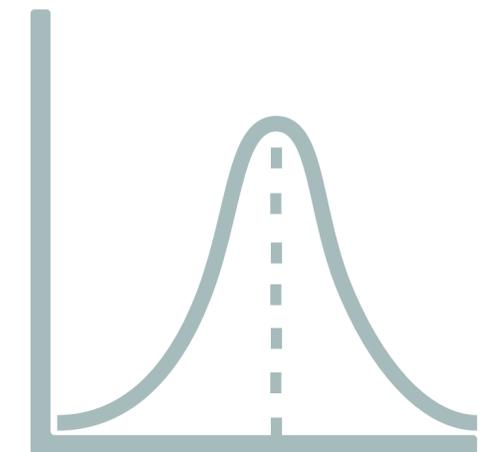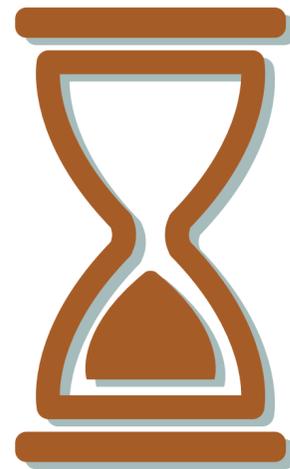
VALIDITY

How to Address Internal Validity

to internal validity

Maturation and time

Testing

Instrumentation

Statistical regression

History

to internal validity

Experimental Mortality and Attrition

Selection Bias

A → B
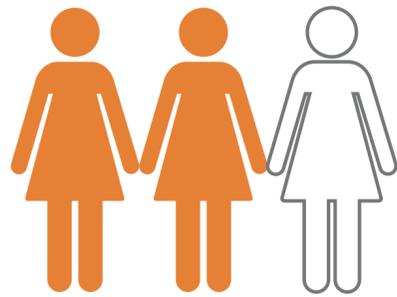
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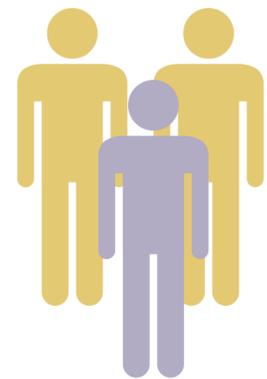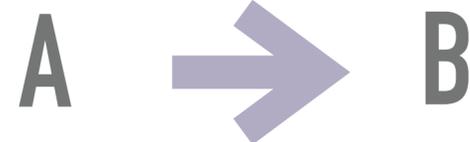
Design Contamination

Diffusion or Imitation of Treatments

CLASSIC THREATS
(Kapp & Anderson, 2010)

to internal validity

Interaction Effects
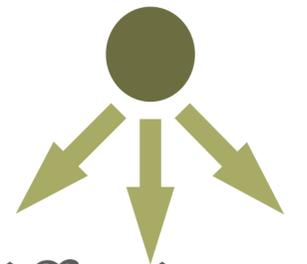
A → B

COMPONENTS OF DESIGN

what should be included in general

- ➤ Defining and describing the intervention or program elements to be evaluated

- ➤ Establishing the time order of the independent variable

- ➤ Manipulating the independent variable

- ➤ Establishing the relationship between the independent and dependent variables

- ➤ Controlling for rival hypotheses

- ➤ Using at least one control group

- ➤ Assigning the person who are subjects in a random manner

PRE-TEST / POST-TEST

Design Methods Activity

Before Intervention

Intervention

After Intervention

Working in small groups, what would you create as a pre-test / post-test

- ➤ Case study approach

- ➤ One group post-test design

- ➤ One-group pre-test and post-test

- ➤ Post-test only with nonequivalent groups

- ➤ Experimental design

- ➤ Matched comparison groups

TYPES OF GROUP DESIGNS
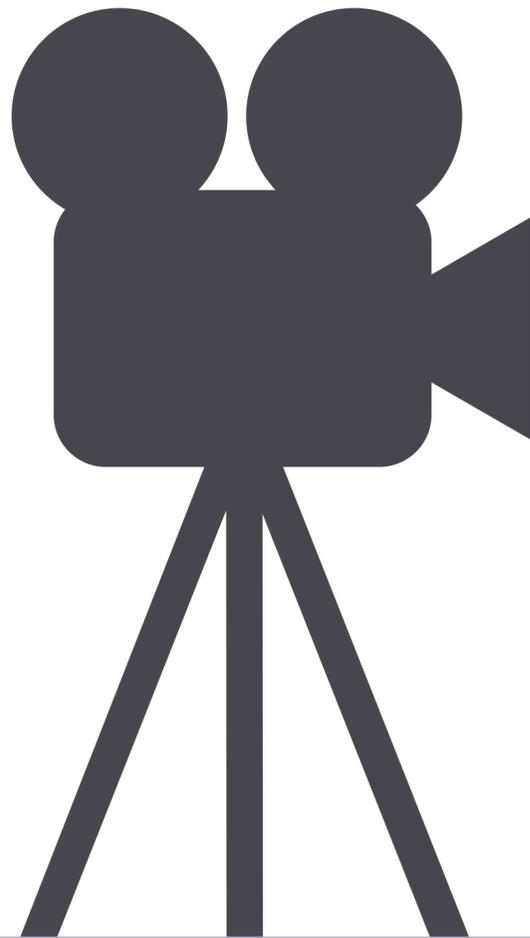*what should be included in general*

TYPES OF GROUP DESIGNS

planning in your groups

➤ Are you going to use a group design for your program evaluation or what method will you be using?

➤ What type of group design method are you going to use?

➤ What are the challenges that you think you will encounter

DESCRIPTION

The group in which an intervention has been introduced is the focus of the study. It will chronicle the progress and process of the group, describing the changes (or lack of change) after the introduction of the intervention.

STRENGTHS

➤ Detailed exploration

➤ Ability to understand complexity

➤ Rich narrative

LIMITATIONS

➤ No comparison group

➤ Case may not have same qualities as sample

➤ Difficult to weigh elements of narrative

CASE STUDY APPROACH

DESCRIPTION

This design involves the implementation of an intervention with a group of people whom that intervention with a group of people for whom that intervention was designed, and then the administration of a simple test or other measurement to ascertain the results of that intervention.

This can be described as an A-B design, with A being the pre-intervention status and B representing the post-intervention status

STRENGTHS

➤ Design is simple and practical

➤ Intervention is intended to increase positive outcome

➤ Intervention delivered and measured

LIMITATIONS

There are concerns about the validity of the findings, the validity of the measurement instrument, and consequently, the inability to present the effectiveness of the intervention with a high degree of confidence

ONE GROUP POST-TEST ONLY DESIGN

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DESCRIPTION

A target group is assessed prior to the intervention and after the intervention they are assessed again using the same measurement tool. It is designed to measure the change that was presumably caused by the intervention.

STRENGTHS

➤ Can show comparison between before and after the intervention

➤ Progress is likely attributable in part to the intervention

LIMITATIONS

➤ Threats to internal validity

➤ Historical considerations

➤ Maturation

➤ Testing and instrumentation

ONE-GROUP PRE-TEST & POST-TEST DESIGN

DESCRIPTION

The post-test only aspect of this design means that the impact of the intervention is only delivered after the intervention. The experience and success of other clients also served by the agency, who have not received the intervention is also measured.

STRENGTHS

Simplicity of the post-test-only design combined with a simple, accessible method for comparison

LIMITATIONS

Concerns abut the ability to compare nonequivalent groups and the lack of randomization mean that strong questions about the validity persist.

POST-TEST ONLY DESIGN WITH NONEQUIVALENT GROUPS

DESCRIPTION

The persons to be studied are randomly assigned to two groups. One group is administered the intervention, and the other group is not administered the intervention. The condition and status of both groups (e.g., experimental group and control) are measured.

STRENGTHS

➤ Allows ability to control threats to internal validity

➤ Presents a higher degree of confidence in the results of the evaluation and effectiveness of the intervention

LIMITATIONS

➤ The cost and effort to create this type of experimental design is higher than others

➤ Ethical concerns association with withholding treatment

EXPERIMENTAL DESIGN

DESCRIPTION

Control group not selected by randomly withholding the intervention

STRENGTHS

➤ May not present the dilemmas posed by an experimental design

➤ Is more compatible with ongoing service delivery

➤ Offers some degree of rigor as it attempts to answer the questions as to the effect of experiencing the benefits of the information
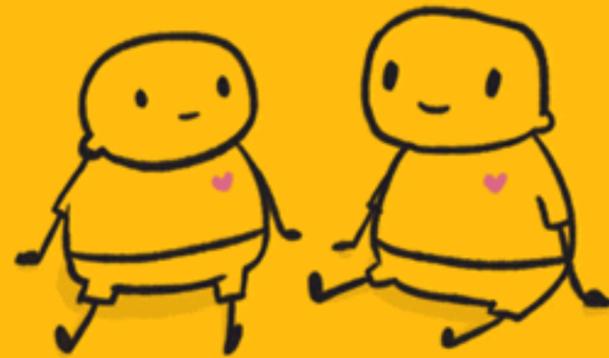
LIMITATIONS

Potentially challenging to identify comparison groups

EXPERIMENTAL DESIGN: COMPARISON GROUPS

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