

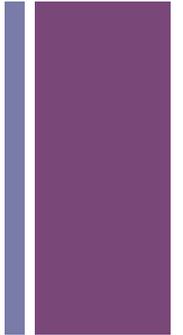
Program Evaluation Planning & Data Analysis

ScWk 242 – Session 11 Slides



Evaluation in Social Work

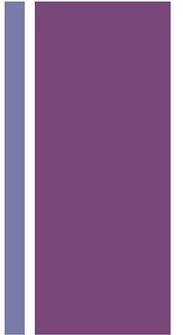
- **In social services, evaluation is primarily guided via the framework of decision-making, but also includes the aspects of cost-effectiveness and cost-benefit analysis.**
- **“Evaluation research is a means of supplying valid and reliable evidence regarding the operation of social programs or clinical practices--how they are planned, how well they operate, and how effectively they achieve their goals” (Monette, Sullivan, & DeJong, 1990, p. 337).**
- **“Program evaluation is done to provide feedback to administrators of human service organizations to help them decide what services to provide to whom and how to provide them most effectively and efficiently” (Shaughnessy & Zechmeister, 1990, p. 340).**
- **Evaluation research refers to the use of scientific research methods to plan intervention programs, to monitor the implementation of new programs and the operation of existing ones, and to determine how effectively programs or clinical practices achieve their goals.**





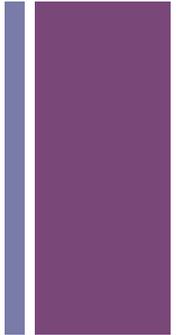
Basic vs. Evaluation Research

- **In *Basic Research*, the researcher can afford to be tentative and conduct more research before they draw strong conclusions about their results (Cozby, 1993).**
- **In *Evaluation Research*, the researcher usually recommends immediate action on the basis of the results. He/she must determine clearly whether a program is successful and valuable enough to be continued.**
- **According to Shaughnessy and Zechmeister (1990), the purpose of program evaluation is practical, not theoretical.**





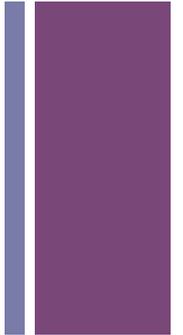
The Need for Program Evaluation



- **According to Monette, Sullivan, and DeJong (1990), evaluation research is conducted for three major reasons:**
 - 1. It can be conducted for administrative purposes, such as to fulfill an evaluation requirement demanded by a funding source, to improve service to clients, or to increase efficiency of program delivery.**
 - 2. A program is assessed to see what effects, if any, it is producing (i.e., impact assessment).**
 - 3. It can be conducted to test hypotheses or evaluate practice approaches.**



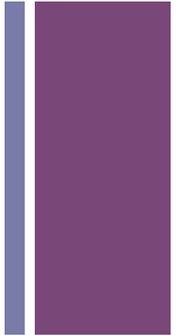
Program Evaluation Design



- **A *design* is a *plan* which dictates *when* and *from whom* measurements will be gathered during the course of the program evaluation**
- **Three types of evaluators:**
 - ◆ ***Monitoring* evaluator: tracks progress through regular reporting. Usually focuses on activities and/or expenditures.**
 - ◆ ***Summative* evaluator: responsible for a summary statement about the effectiveness of the program**
 - ◆ ***Formative* evaluator: helper and advisor to the program planners and developers**
- **The critical characteristic of any one evaluation study is that it provide the best possible information that could have been collected under the circumstances, and that this information meet the credibility requirements of its evaluation audience**



Evaluation Implementation Steps



- **Initial planning: Deciding what to measure:**
 - ✓ **What are the program's critical characteristics?**
 - ✓ **How much supporting data do you need?**

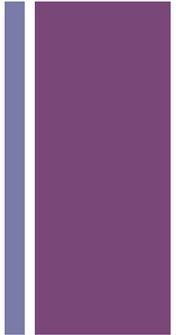
- **Steps for planning data collection:**
 - ✓ **Choosing data collection methods**
 - ✓ **Determining whether appropriate measures already exist**
 - ✓ **Creating a sampling strategy**
 - ✓ **Thinking about validity and reliability**
 - ✓ **Planning for data analysis**



Evaluation Data Collection Options

Sources of Information:

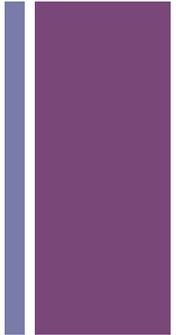
- ▶ **Surveys**
 - ▶ **Interviews**
 - ▶ **Observations**
 - ▶ **Record Reviews**
- ▶ All have limitations and benefits
 - ▶ All can be used to collect either quantitative or qualitative data
 - ▶ Require preparation on the front end of:
 - Instrument Development and testing
 - Administration plan development
 - Analysis plan development





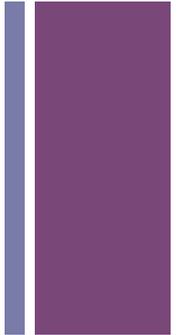
Standards for Questions and Answers:

- **Questions need to be consistently understood.**
- **Questions need to be consistently administered or communicated to respondents.**
- **What constitutes an adequate answer should be consistently communicated.**
- **Unless measuring knowledge is the goal of the question, all respondents should have access to the information needed to answer the question accurately.**
- **Respondents must be willing to provide the answers called for in the question.**





Info Needed Prior to Evaluation



- 1. What are the purposes of the program?**
- 2. What stage is the program in? (new, developing, mature, phasing out)**
- 3. Who are the program clients?**
- 4. Who are the key program staff (and where applicable, in which department is the program)?**
- 5. What specific strategies are used to deliver program services?**
- 6. What outcomes are program participants expected to achieve?**
- 7. Are there any other evaluation studies currently being conducted regarding this program?**
- 8. Who are the funders of the program?**
- 9. What is the total program budget?**
- 10. Why this program was selected for evaluation?**



Assessing Organizational Effectiveness

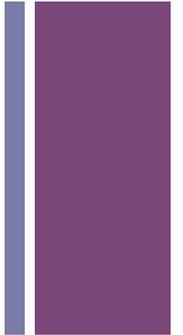
***Organizational effectiveness* = the ability of an organization to fulfill its mission via:**

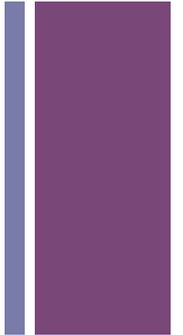
- ◆ **sound management,**
- ◆ **strong governance,**
- ◆ **persistent rededication to achieving results**

***Assessing Outcomes* = Changes in attitudes, behavior, skills, knowledge, condition or status.**

Must be:

- ▶ **Realistic and attainable**
- ▶ **Related to core organizational goals**
- ▶ **Within the program's sphere of influence**



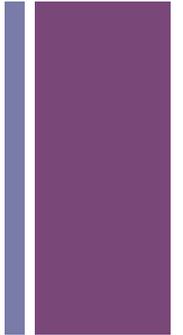


Examples of Indicators

Outcome	Process Indicators	Outcome Indicators
Improved communication skills	Number of meetings indiv./family/school	Effective expression of thoughts and feelings
Improved relationships	Duration of meetings	More positive interaction with peers and adults
Increased positive behaviors	Meeting attendance	Reduced/no indication of illegal or inappropriate behavior
Improved life skills	Quality of staff and materials	



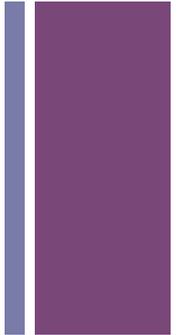
Data Collection Questions



- **Who will you collect data about?**
Clients, caregivers, other service providers working with clients, staff, some other group? Who are considered participants of your program? Be sure to clearly specify your eval. target population.
- **What instruments do you need?**
Surveys, interview guides, observation checklists and/or protocols, record extraction or record review protocols?
- **Are there any pre-tested instruments** (e.g., scales for measuring human conditions and attitudes)?
 - If not, how will you confirm validity?



Sample Size Considerations

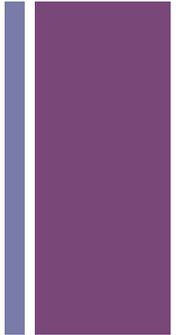


- The sample should be as large as practically and probabilistically required.
- If a population is smaller than 100, generally include them all.
- When a sample is comparatively large, adding cases usually does not increase precision.
- When the population size is small, relatively large proportions are required, and vice versa.
- You must always draw a larger sample than needed to accommodate refusals.

Desired sample size ÷ (1-refusal proportion)



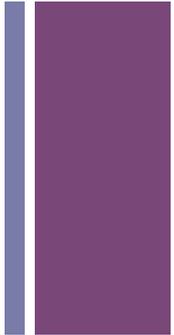
Analyzing Quantitative Data



- I. Develop an Analysis Plan**
- II. Code and Enter Data**
- III. Verify Data Entry**
- IV. Prepare Data for Analysis**
- V. Conduct Analyses According to the Plan**
- VI. Develop Tables, Figures and Narrative Summaries to Display Results of Analysis**



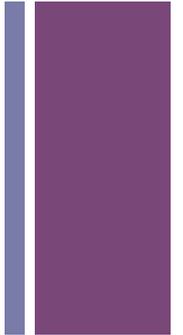
Sources of Record Review Data



Available Administrative Data	Other Extant Data
<p>Intake Forms</p> <p>Attendance Rosters</p> <p>Program Logs (e.g., daily activity descriptions)</p> <p>Evaluation Forms (e.g., customer satisfaction surveys, session assessments)</p> <p>Case Files or Case Management Data (these may include both internal data - such as progress toward internally established goals; and external data - such as reports about a participant's living arrangements, employment or childbearing status).</p> <p>Exit or Follow-up Data</p> <p>Assessments (these may also include both internal data - such as culminating knowledge measurements at the end of a cycle; and external data such as test scores, report card grades; scale scores on a behavioral scale; medical or substance use test results).</p>	<p>Census Data -- available on the internet, in libraries or by demand from marketing firms.</p> <p>Vital Statistics -- also available on the internet, in libraries and from local health departments</p> <p>Topical Outcome Data -- e.g., crime statistics, birth outcomes, juvenile arrest data</p> <p>KIDS COUNT child well-being indicators</p> <p>National survey data -- e.g., NELS, NLS, YRBS</p> <p>Community Profile Data</p> <p>UI (unemployment insurance) data</p>



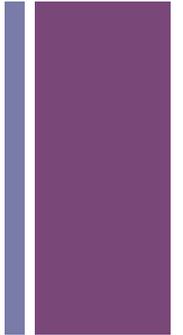
Important Data Related Terms



- **Data can exist in a variety of forms**
 - **Records:** Numbers or text on pieces of paper
 - **Digital/computer:** Bits and bytes stored electronically
 - **Memory:** Perceptions, observations or facts stored in a person's mind
- **Qualitative vs. Quantitative**
- **Primary vs. Secondary Data**
- **Variables (Items)**
- **Unit of Analysis**
- **Duplicated v. Unduplicated**
- **Unit Record (Client-level) vs. Aggregated**



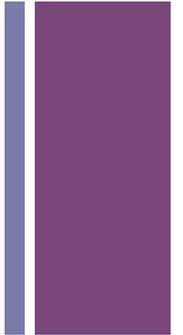
More Data Definitions



- **Case:** individual record (e.g., 1 participant, 1 day, 1 activity)
- **Demographics:** descriptive characteristics (e.g., gender)
- **Disaggregate:** to separate or group information (e.g., to look at data for males separately from females) – conducting crosstabs is a strategy for disaggregating data.
- **Partition(v):** another term that means disaggregate.
- **Unit of Analysis:** the major entity of the analysis – i.e., the what or the whom is being studied (e.g., participants, groups, activities)
- **Variable:** something that changes (e.g., number of hours of attendance)



Options - Analyzing Quantitative Data



Items to Look at or Summarize:

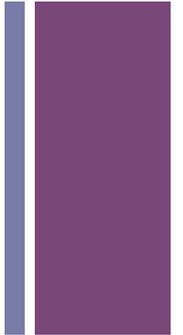
- Frequencies: How often a response or status occurs.
- Total and Valid Percentages: $\text{Frequency}/\text{total} * 100$
- Measures of Central Tendency: Mean, Median, (Modes)
- Distribution: Minimum, Maximum, Groups
- Cross-Tabulations: Relationship between two or more variables (also called contingency analyses, can include significance tests such as chi-square analyses)

Useful, 2nd Level Procedures:

- Means testing and analysis (ANOVA, t-Tests)
- Correlations
- Regression Analyses



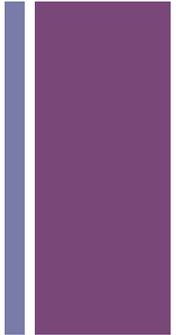
Good Evaluation Designs Include:



- ✓ Summary information about the program
- ✓ Questions to be addressed by the evaluation
- ✓ Data collection strategies that will be used
- ✓ The individuals who will undertake the activities
- ✓ When the activities will be conducted
- ✓ Products of the evaluation (who will receive them and how they should be used)
- ✓ Projected costs to do the evaluation



Using Multiple Info Sources

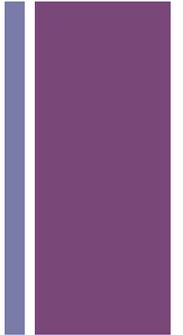


Develop an overall analysis plan, guided by your evaluation questions.

- **Clarify why you are using multiple methods.**
 - **Sequence**: Are you using one form of data collection to inform the design of the next (i.e. informant interviews prior to record review)?
 - **To answer different questions**: Your different methods may be designed to answer different evaluation questions. For example, record review may be your source of information on caseworker compliance with protocols, while interviews may be your source on how they are using the new protocols.
 - **Triangulation**: Both sources may answer the same question. Interviews with caseworkers is one source of information on compliance with the new protocols, record reviews could be another source to substantiate the interview findings.
- **Plan out how you will join your analysis across the methods and determine the overall findings.**
 - E.g., -- analyze the interview data to determine the extent to which caseworkers are using the new protocols, and will then check these results against the record review data. Will also examine the records for specific examples of the types of protocol use that caseworkers report in the interviews



Projecting Timelines

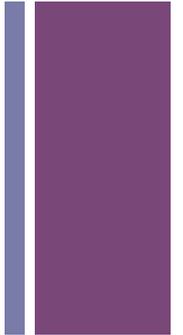


Timelines can be constructed separately or embedded in a chart. To project timelines:

- **Assign dates to your level of effort, working backward from overall timeline requirements.**
- **Be sure the number of days required for a task and when it must be completed are in sync and feasible.**
- **Check to make sure evaluation calendar is in alignment with program calendar.**
 - ➔ **Don't plan to do a lot of data collecting around program holidays**
 - ➔ **Don't expect to collect data only between 9 am and 5 pm**



Communicating Findings



Who is your audience?

Staff? Funders? Board? Participants? Multiple?

What Presentation Strategies work best?

PowerPoint

Newsletter

Fact sheet

Oral presentation

Visual displays

Video

Storytelling

Press releases

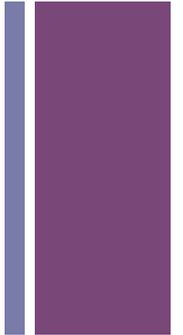
Report Formats:

full report, executive summary,
stakeholder-specific report?



Preparing a Strong Evaluation Report

- ▶ **Description of the subject program.**
- ▶ **Clear statement about the evaluation questions and the purpose of the evaluation.**
- ▶ **Description of actual data collection methods**
- ▶ **Summary of key findings (including tables, graphs, vignettes, quotes, etc.)**
- ▶ **Discussion or explanation of the meaning and importance of key findings**
- ▶ **Suggested Action Steps**
- ▶ **Next Steps (for the program and the evaluation)**
- ▶ **Issues for Further Consideration (loose ends)**





Linking Evaluation with Planning

Organizations that Regularly use Evaluation Should Also . . .

- **Think carefully about developing and assessing programs and other actions.**
- **Incorporate program evaluation findings and other assessment findings into program and other planning.**
- **Involve significant others in planning and revising plans.**
- **Develop written, logical plans.**
- **Follow plans.**
- **Have strategies in place to modify plans**

