Basics of Evaluation For Practitioners

Natalie Kroovand Hipple, PhD   February 11, 2015

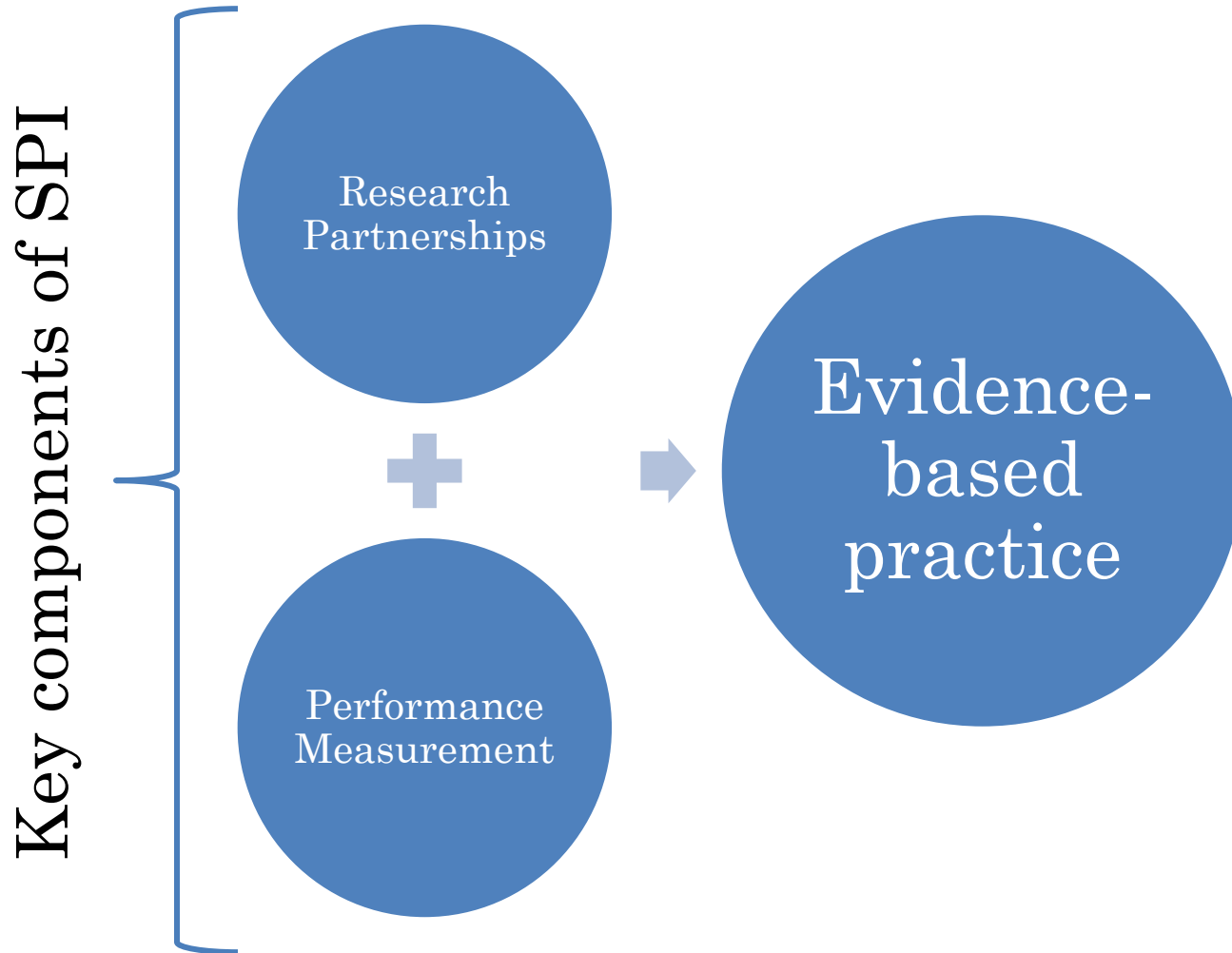SPI Subject Matter Expert

Webinar Agenda

- Welcome
  - Mike White, SPI Senior SME & Professor, Arizona State University
- Key components of SPI
- Research
- Evaluation
- Evaluability
- Port St. Lucie, FL SPI Site
  - Rachel Boba Santos, Research Partner & Associate Professor, Florida Atlantic University

KEY COMPONENTS OF SPI

Smart Policing Initiative

Key components of SPI

- Research Partnerships
- +
- Performance Measurement

→ Evidence-based practice

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Research and analysis: 5 Ws

What was the problem you addressed?

What analytical process was used to identify the problem?

What methods worked to address the problem?

What did not work?

What were the results?

SPI Model (Action research)

- Active, ongoing partnership between researchers and practitioner agencies
- Use research process to help solve local problems
  - Data collection to identify and understand problems
  - Strategic analysis to develop targeted interventions
  - Program monitoring and feedback for refinement

Strategic Problem-Solving Model
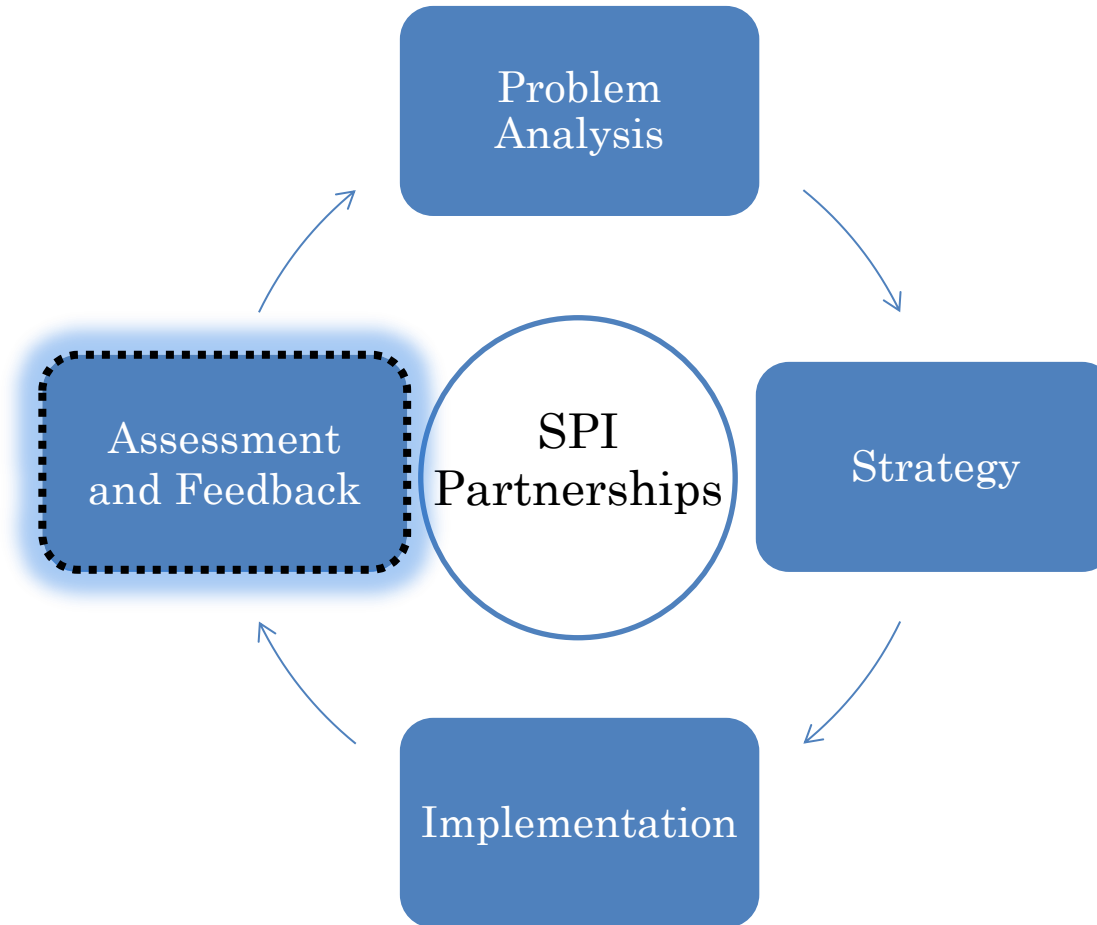
Researcher Role

- Monitor the implementation of the interventions

- Provide constant assessment and feedback on the conduct and effects of the interventions

- Modify and refine the interventions based on feedback assessments

- Evaluate the impacts of the interventions on the service delivery system and on the targeted crime problem

RESEARCH

What is research?

- Contributes to theory
- Empirically-based
- Cumulative (built on prior research)
- Objective
- Generalizable (ideally)
- Valid and reliable

Types of Research

Basic Research
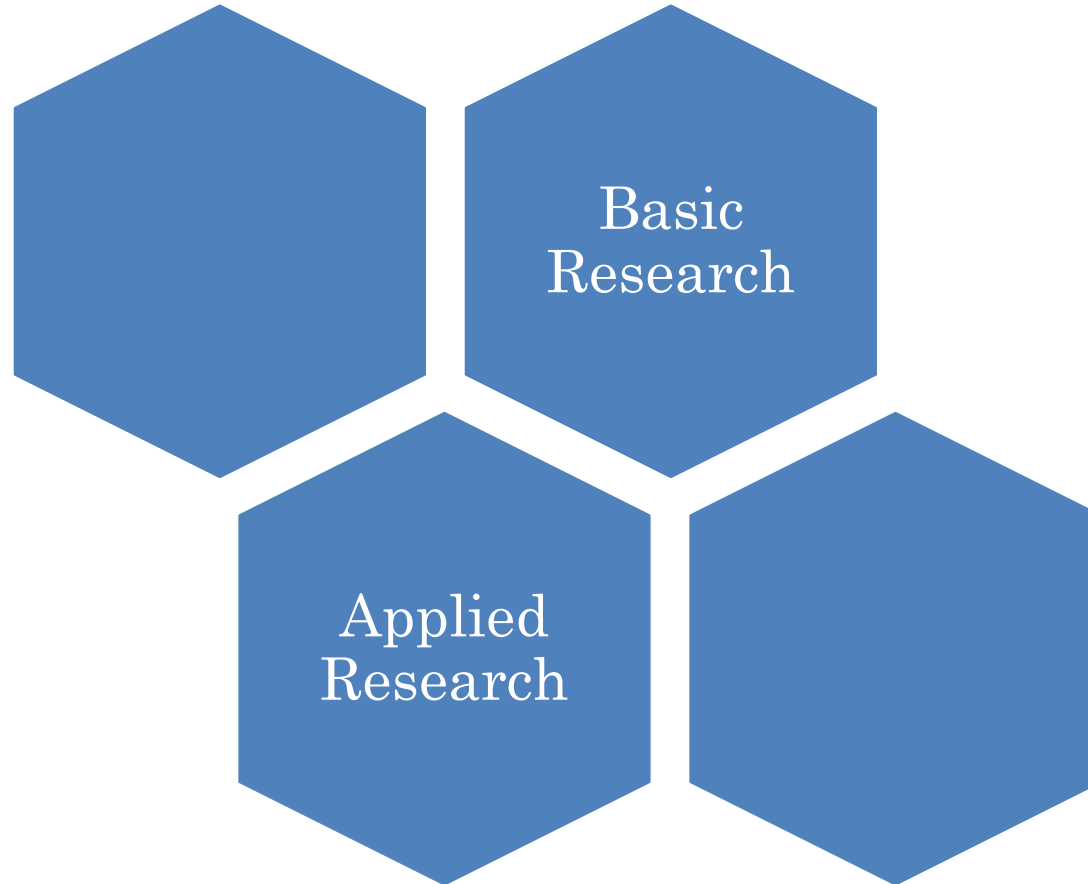
Applied Research

What is evaluation?

- Applied research

- Methods
  - Design → Data collection → Analysis

- Identify effectiveness
  - Link program activities to public safety outcomes
  - Add credible knowledge to the fields

What is evaluation?

- Informs policy and practice
- Should be part of project planning
- Should be refined if need be
- Cannot isolate the effects of treatment without proper evaluation

Design		Data Collection		Analysis		Feedback

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Types of Evaluation

- Process
  - Did you do what you said you were going to do?
    - Challenges and corrections
  - Accountability

- Outcome
  - Did you meet your measureable goals and objectives?
  - Did the intervention CAUSE the problem to decline?

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Evaluation Questions

- Is the process satisfactory?

- What are the outcomes?

- What are the costs?

- What are the benefits?

- Should it continue?
  - Sustainability

- How can it be improved?

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Qualitative v. Quantitative Data

Qualitative

- In-depth interviews
- Focus groups
- Ethnographies
- Maps

Quantitative

- Surveys (can be both)
- Data analysis

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EVALUATION

Evaluation

- Randomized Control Trial (RCT)

- Quasi-experimental

- Other

Interpreting Evaluations

	Process Evaluation Results
	Intervention implemented as planned
Outcome Evaluation Results Problem declined	Evidence that the response caused the decline

Interpreting Evaluations

	Process Evaluation Results	
	Intervention implemented as planned	
Outcome Evaluation Results	**Problem did not decline**	**Evidence that the response was ineffective, and that a different response should be tried**

Interpreting Evaluations

	Process Evaluation Results
	Implementation failure or not implemented as planned
Problem declined	Suggests that other factors may have caused the decline, or that the response was accidentally effective

(left axis label: **Outcome Evaluation Results**)

Interpreting Evaluations

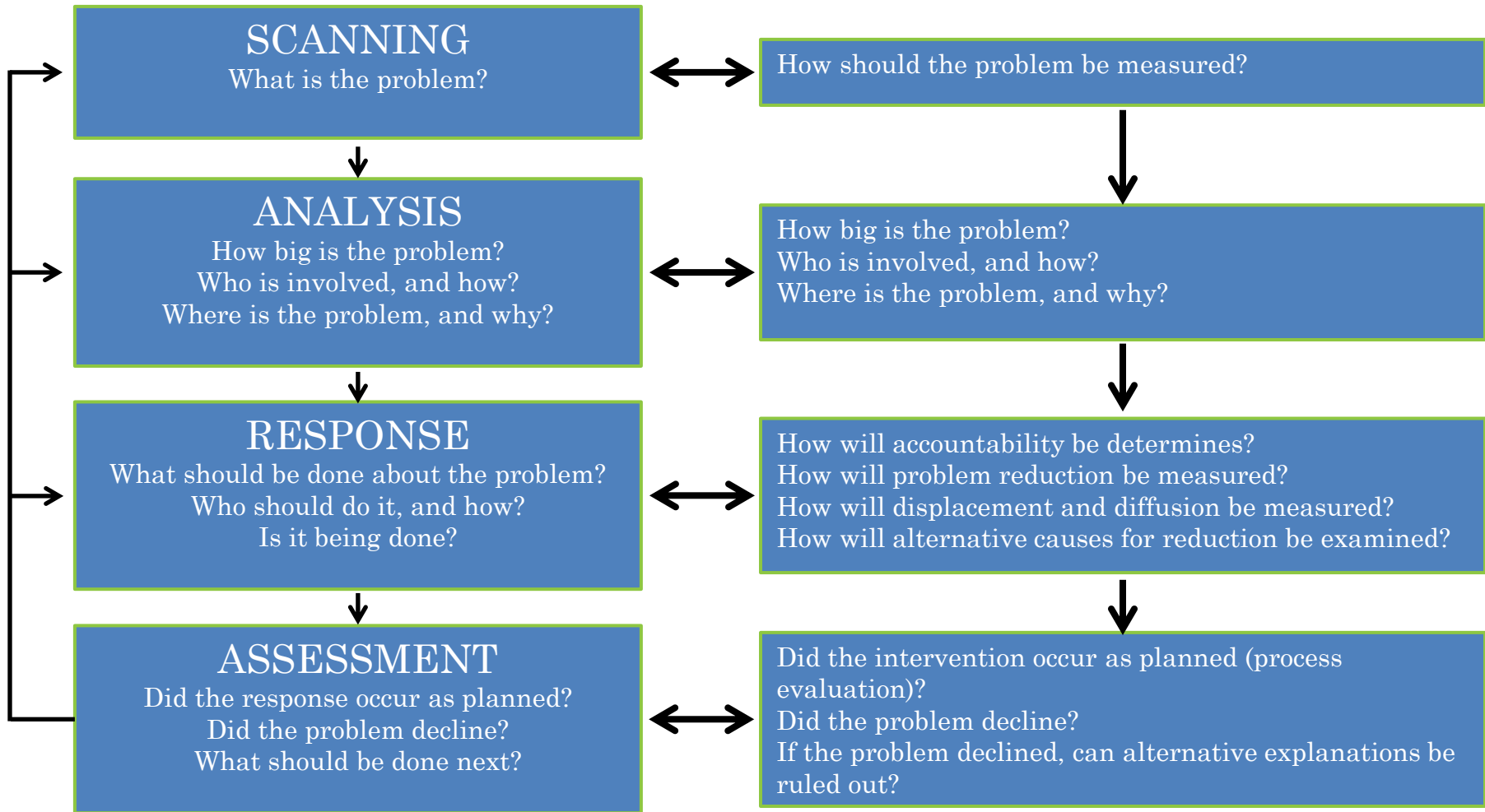|	Process Evaluation Results
	Implementation failure or not implemented as planned
Problem did not decline	Little is learned. Perhaps if the response had been implemented as planned, the problem would have declined, but this is speculative

Problem-Solving Stages and Major Questions

Critical Evaluation Questions

SCANNING
What is the problem?

⟷ How should the problem be measured?

ANALYSIS
How big is the problem?
Who is involved, and how?
Where is the problem, and why?

⟷ How big is the problem?
Who is involved, and how?
Where is the problem, and why?

RESPONSE
What should be done about the problem?
Who should do it, and how?
Is it being done?

⟷ How will accountability be determines?
How will problem reduction be measured?
How will displacement and diffusion be measured?
How will alternative causes for reduction be examined?

ASSESSMENT
Did the response occur as planned?
Did the problem decline?
What should be done next?

⟷ Did the intervention occur as planned (process evaluation)?
Did the problem decline?
If the problem declined, can alternative explanations be ruled out?

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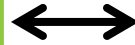
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EVALUABILITY

Indicators of Evaluability

- Clearly identified public safety outcomes

- Logical link between program goals, observed activities, target population needs, and expected or observed outcomes

- Uses an empirically-supported intervention in an innovative way

- Already planning or completed an outcome evaluation

Indicators of Evaluability

- Data collection is an integral part of program activities

- Sufficient sample sizes and appropriate comparison groups

- Program staff understand what will be involved in an outcome evaluation and are willing to support one

Key Questions to Ask

- What is the problem to be addressed?

- Is there a defined and measureable intervention?

- Is the intervention modeled after evidence-based practices (EBP)?

- Is there a logical link between program activities and public safety outcomes?

- Are the necessary partners involved to effect change?

- Is change expected at multiple levels?

Key Questions to Ask

- Can we track intervention dosage?

- Can we isolate the impact of the intervention?

- Are sample sizes large enough to support an impact evaluation?

- Are there suitable comparison groups?

Obstacles to Evaluability

- Lack of full implementation

- Inability to identify public safety outcomes

- No logical link between program activities and/or target population to program goals

- Small sample sizes

- Large number of confounding variables that need to be identified and measured

- Prior research is substantial and strong in the area

- Inadequate data sources, particularly to measure public safety outcomes and cost-benefit

SPI Example: Port St. Lucie, FL

- Dr. Rachel Santos, Florida Atlantic University
- Goal: Implement offender-based responses in residential burglary and residential theft from vehicle hot spots.
- Process Evaluation
- Outcome Evaluation
  - Randomized Control Experiment
    - Block randomization
  - Offender interviews

Wrap Up: Things to consider

- What *is* our intervention?

- Do we have measureable goals?

- What data are required?

- Methods
  - Quantitative v. qualitative

- Experimental design
  - Random assignment v. quasi-experimental

Resources

- Speaker Information: Dr. Natalie Hipple
  nkroovan@indiana.edu

- Eck, J. E. (2010). Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers. In U.S. Department of Justice, Community Oriented Policing Services, (Ed.), *Problem-Oriented Guides for Police Problem-Solving Tools Series*. Washington, DC. http://www.popcenter.org/tools/assessing_responses

- Bureau of Justice Assistance Center for Program Evaluation and Performance Measurement https://www.bja.gov/evaluation/guide/index.htm

Resources

- Assessing evaluability
  http://www.nij.gov/journals/254/pages/evaluation_dollars.aspx#note1

- Dahlberg, L., & McCaig, C. (2010). *Practical research and evaluation: a start-to-finish guide for practitioners*: Sage.

- Clarke, A., & Dawson, R. (1999). *Evaluation research: An introduction to principles, methods and practice*: Sage.