How to Improve and Sustain Quality over the Life Cycle of Programs

Lily Gleicher, M.S., ABD
Research Analyst
Center for Justice Research and Evaluation
Illinois Criminal Justice Information Authority

Objectives

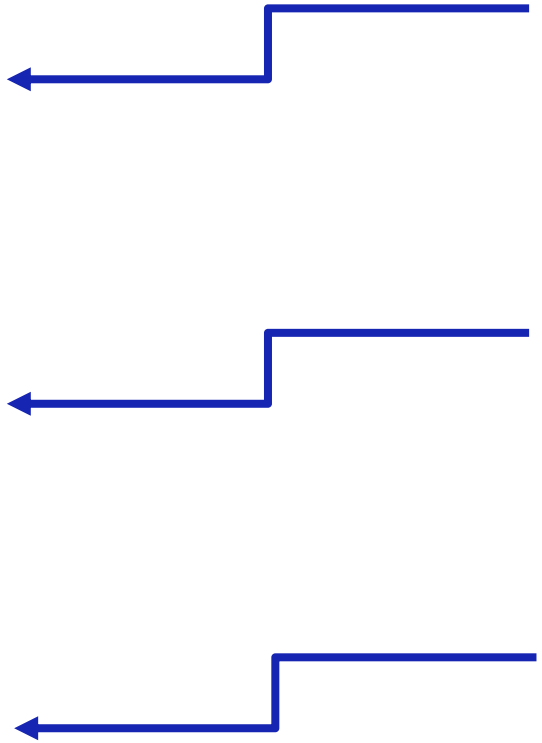
- Defining EBPs and relation to logic models
- Implementation science & quality
- Program adaptation and modification

IDENTIFYING AND DEFINING EVIDENCE-BASED PRACTICES

What is evidence-based?

- **2 key elements**:
  - Causal evidence
  - Acquired through **high quality process** and **outcome evaluations**
    - Ruling out alternative explanations
- **Rigorous evaluation**
  - Objective
  - Replicable
  - Generalizable
- Correlation does not equal causation!

Overall Effect	Requirements	Terminology
No Effect/Unknown Effect	There is **little or no evidence**, through the use of reliable, rigorous, replicable, and generalizable research, indicating the programs achieve what they are intended to achieve.	**Anecdote**
Promising	There is **some evidence**, through the use of reliable, rigorous, replicable, and generalizable research, indicating the programs achieve what they are set out to achieve.	**Evidence-Informed**
Effective	There is **strong evidence**, through use of reliable, rigorous, replicable, and generalizable research, indicating programs achieve what they are set out to achieve.	**Evidence-Based**



IMPLEMENTATION SCIENCE

Program vs. Practice

- **Practice:** skills, techniques, strategies used when interacting with the consumer/client; core intervention components or principles; an approach or framework based on research
  - **Examples:**
    - Cognitive mapping
    - Structured skill building
    - Cognitive restructuring
    - Motivational interviewing
    - Risk/needs assessment (e.g. LSI-R)

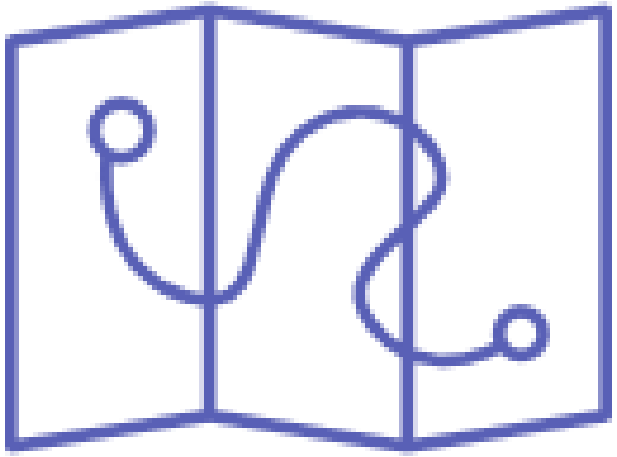
- **Program:** Structured, multi-faceted interventions created to serve consumers/clients with complex problems; comprised of a set of coordinated services (or practices)
  - **Examples:**
    - Hawaii's Opportunity Probation with Enforcement (HOPE)
    - Drug Court
    - Mental Health Court

Fixsen et al., 2005; JRSA, 2015

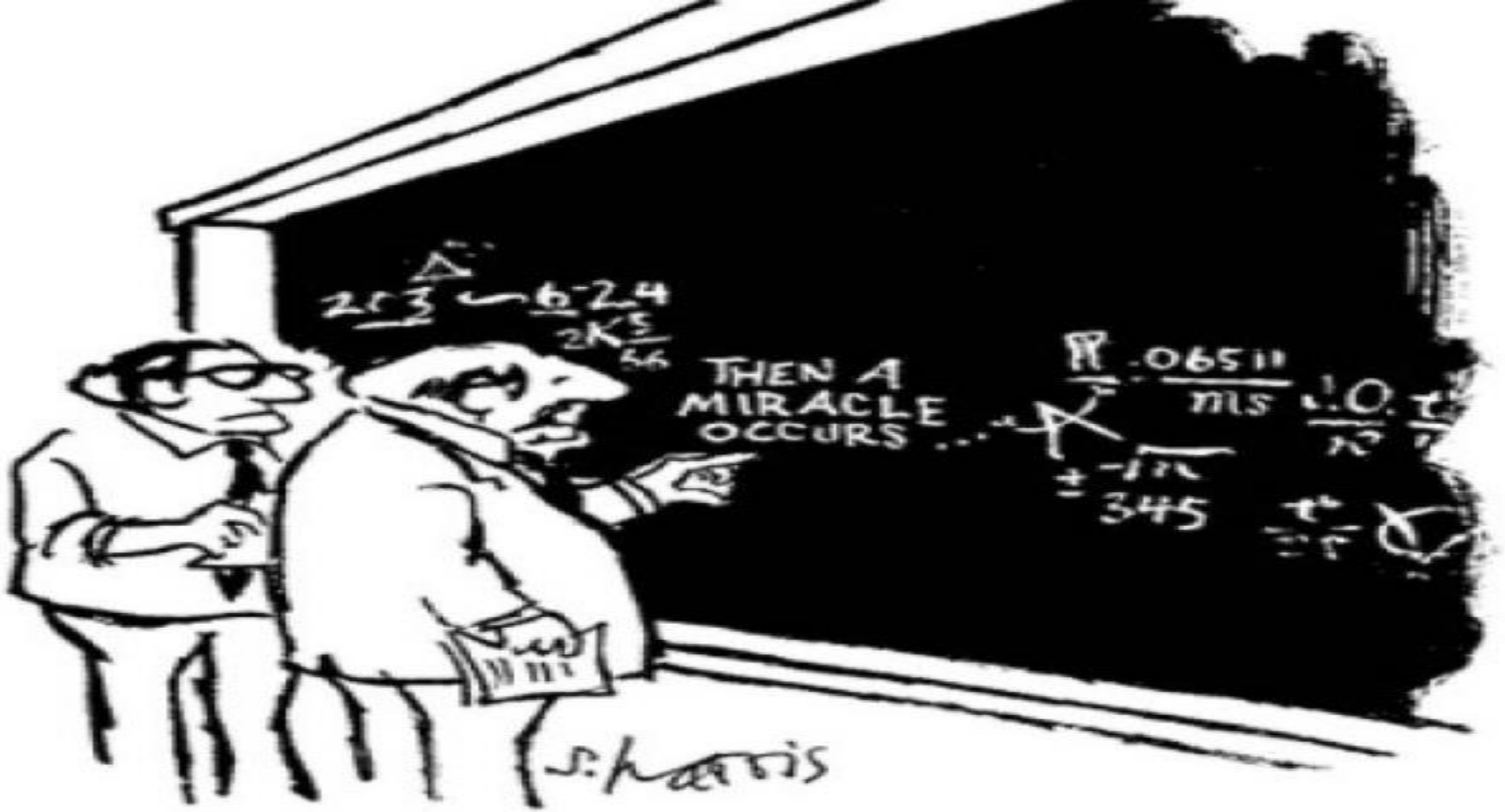
Logic or Program Models: “Roadmaps”

- **Coordination** of **activities** within a program or practice.
- Action plan.

- Can help:
  - Organize, explain, and reflect/analyze a program or practice
  - Generate knowledge of a program or practice
  - Method for program management and assessment
  - Identify how and why program will produce desired outcomes

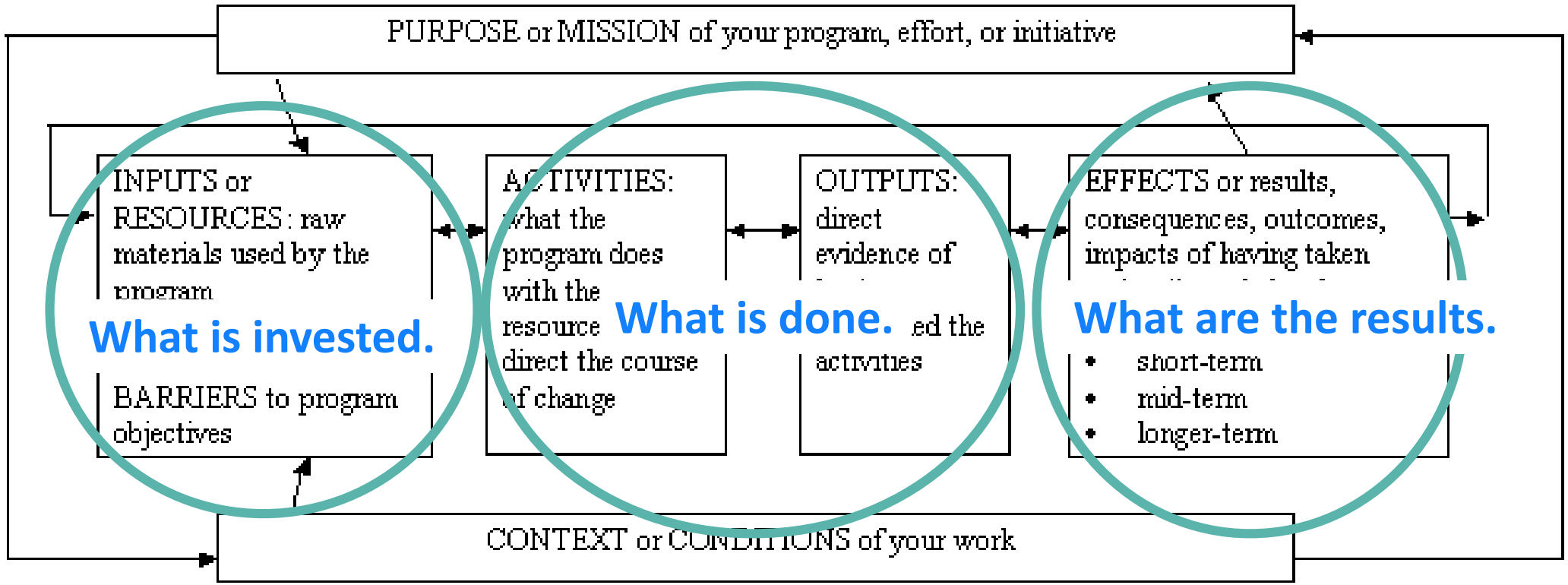


Enhancing Program Performance with Logic Models, University of Wisconsin-Extension, Feb. 2003;
Pell Institute. (2017). Using a Logic Model. http://toolkit.pellinstitute.org/evaluation-guide/plan-budget/using-a-logic-model/



"I think you should be more explicit here in step two."

Logic or Program Model



From Community Tool Box: http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/main

Implementation

*"The ideas embodied in innovative social programs are **not self-executing**. Instead, what is needed is an **implementation perspective on innovation**—an approach that views post-adoption events as crucial and focuses on the actions of those who convert it into practice as the key to success or failure." (Petersilia, 1990, p. 129)*

What is Implementation Science?

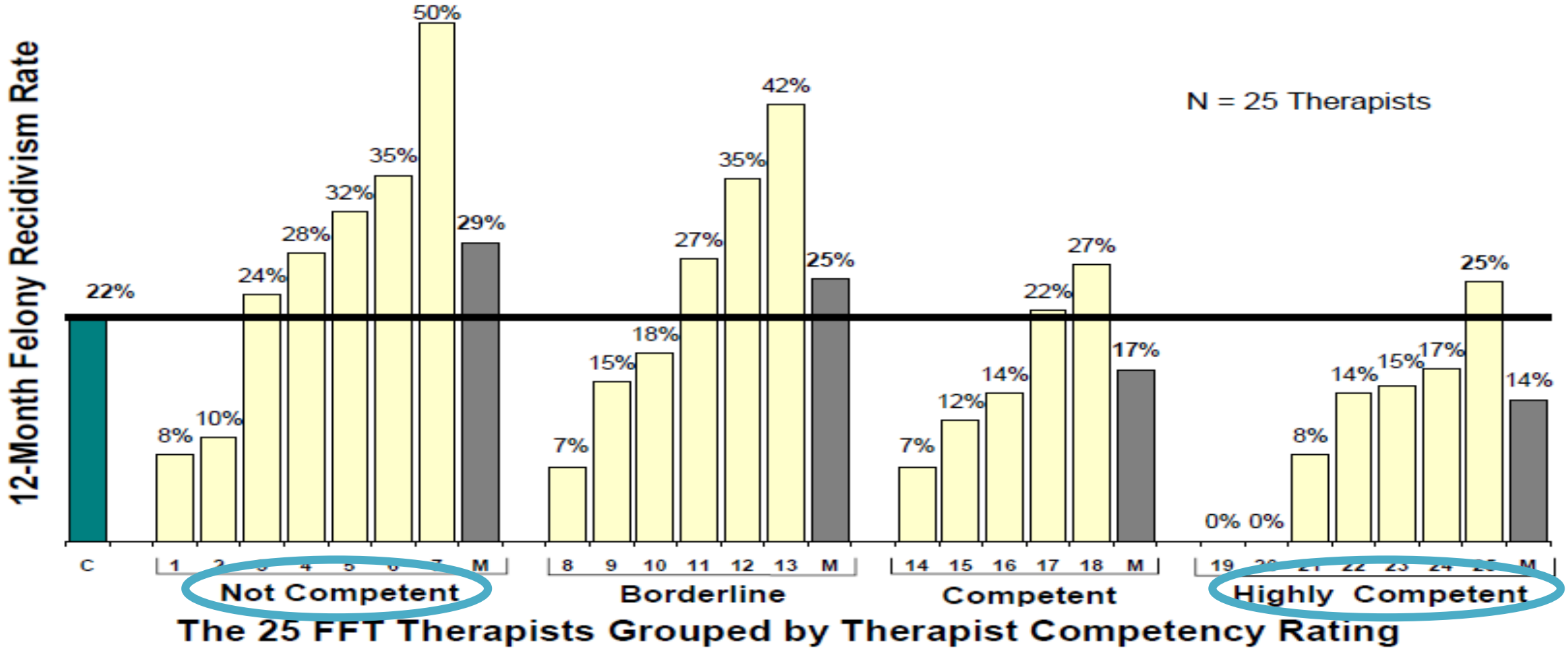
- The study of methods to **understand and promote the integration of research (evidence) into complex, real-world settings; not based solely on experience**
  - Bridge gap between research and real-world
  - Conceptual framework and guide for implementation
  - Accounting for complexity of human interactions
  - Constantly changing systems

Implementing EBPs

- **Implementation fidelity**—"fidelity to the model"
  - How well real-world implementation aligns with prescribed model

- Significant and strong empirical evidence indicates an **effective program implemented poorly can**:
  - Produce outcomes that are **inconsistent**
  - Produce outcomes that are **unsustainable**
  - Produce **poor** outcomes
  - Potentially **harmful** outcomes

12-Month Felony Recidivism Rate for Youth Assigned to Individual FFT Therapists



The 25 FFT Therapists Grouped by Therapist Competency Rating

C=Control Group, M=Therapist Group Mean

Precursors to Implementation

- **Organizational readiness**
  - Climate and culture
  - Resource availability
  - Organizational commitment and fairness
  - Attitudes towards change; perceptions of leadership
  - Staff and administrative emphasis on quality of services
  - Work environment
- **Needs assessment to identify appropriate or change in EBPs**

Precursors/Ongoing Components of Implementation

- **Implementation team**
  - Cross-sectional cut of organization
- **Logic Model**
  - Clarifies what the program is, essential program functions, operationalization of those functions, and quality assurance process to assess fidelity
- Create **policies and processes** that support effective implementation and monitoring
  - Implementation standards; Embed into contracts
  - Align administrative policies and processes to support effective implementation
- Create **systems to monitor** program or practice **implementation and performance improvement**

Implementation Science

"Implementation is a process, not an event."

Functional Stages of Implementation

Exploration

-Assess organization and client needs

-Identify and examine intervention components

-Consider implementation drivers

-Assess fit

Installation

-Obtain resources for program/practice

-Prepare organization and staff

-Prepare implementation drivers

Initial Implementation

-Assess and adjust implementation drivers

-Manage change

-Deploy and use data systems

-Start improvement cycles

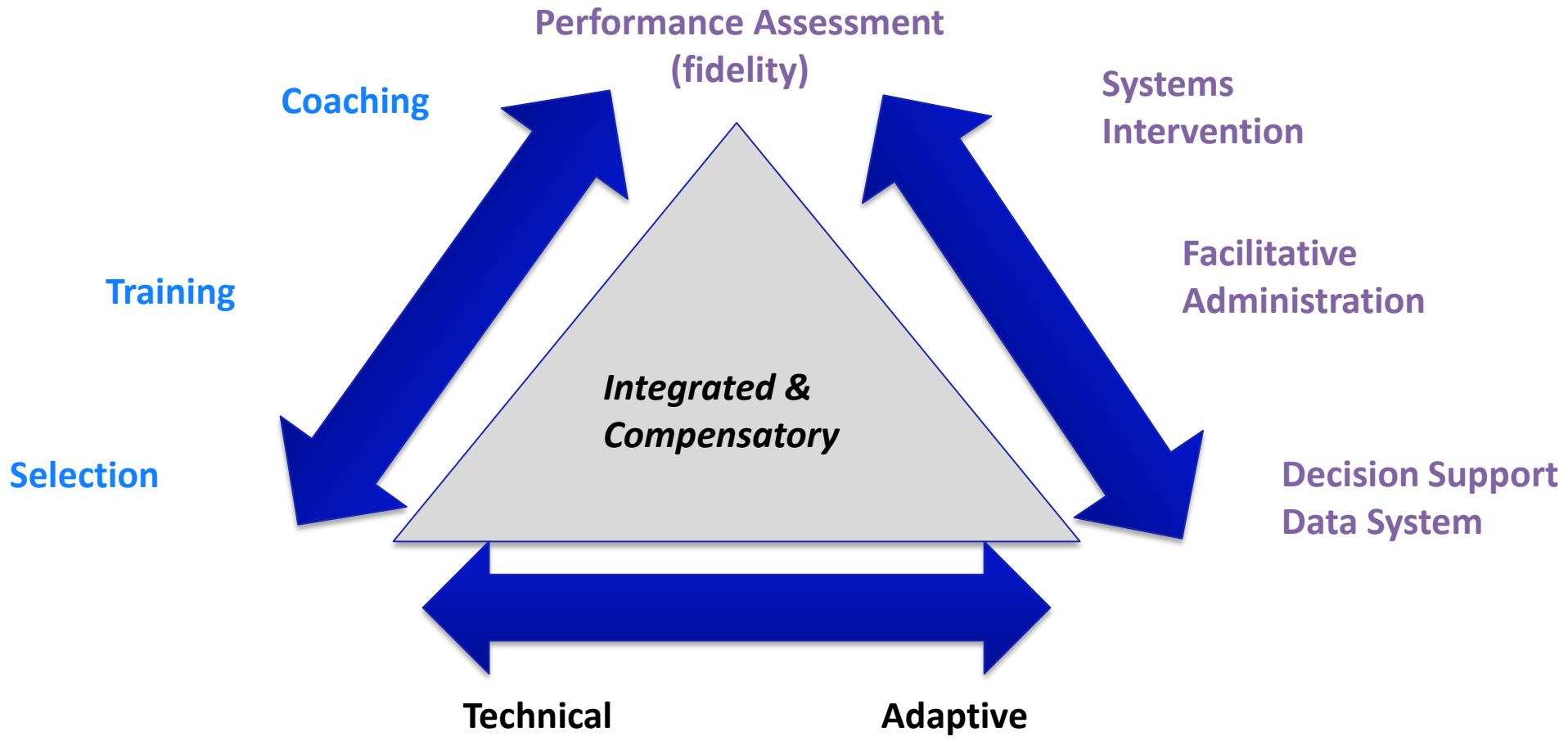
Full Implementation & Sustainability

-Monitor, manage, and assess implementation drivers

-Achieve fidelity and outcome benchmarks

-Improve fidelity and outcomes

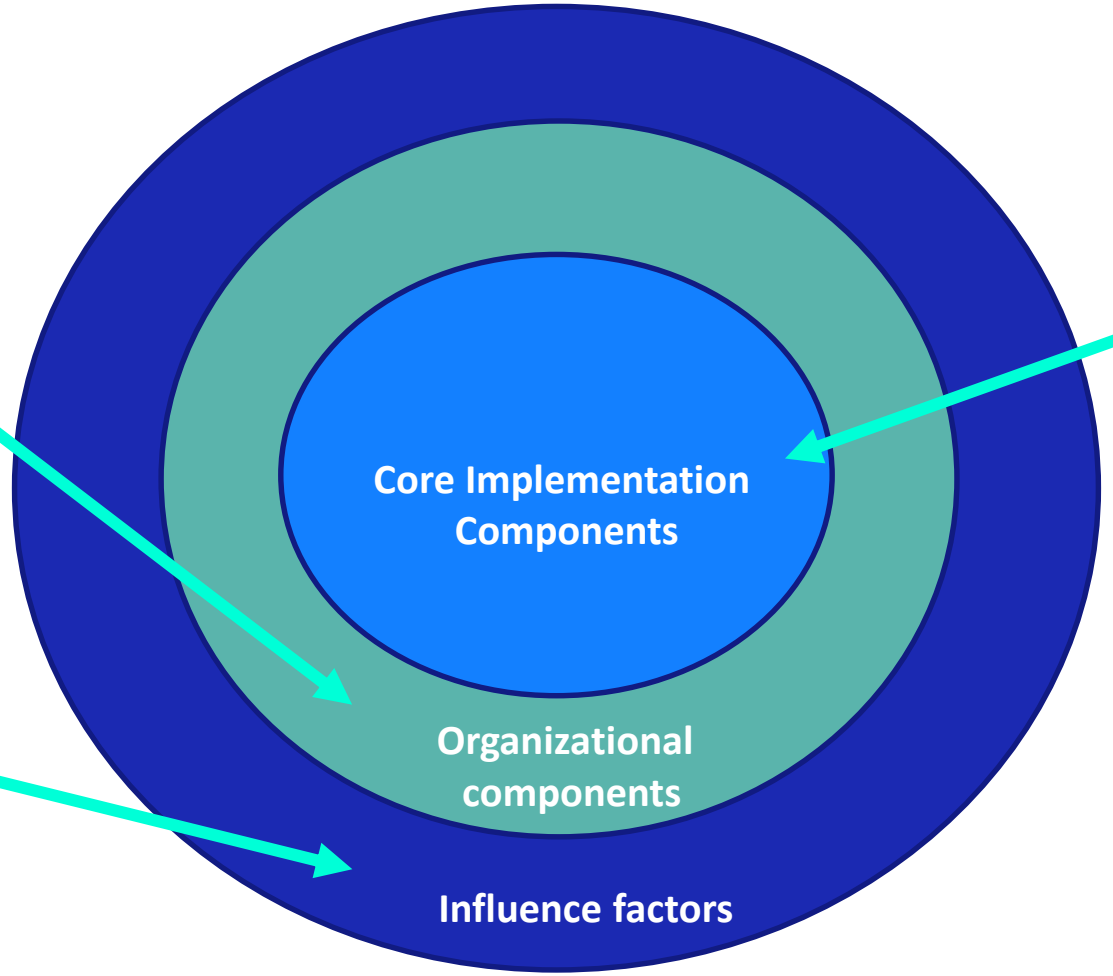
Competency Drivers



Multilevel Factors Related to Successful Implementation

Organizational components:
Selection, Program Evaluation, Admin, Systems Intervention

Influence factors:
Social, Economic, Political



Core Implementation Components:
Training, Coaching, Performance Measurement

© 2013-2015 Dean L. Fixsen, Karen A. Blase, Sandra F. Naoom and Michelle A. Duda, NIRN v. 5/2015

Multilevel Factors Related to Successful Implementation

- **Implementation drivers** necessary for fidelity and good outcomes
- **Organizational components** necessary to enable and support implementation drivers over the long-term
- Must occur within the context of **influence factors**
  - changes in governments, leadership, funding priorities, economic boom-bust cycles, shifting social priorities, etc…
- **Implementation teams** help initiative, improve, sustain EBP at each level
  - Importance of a logic model to help guide these changes around effective EBP components

What are some common barriers to implementation within your agencies?

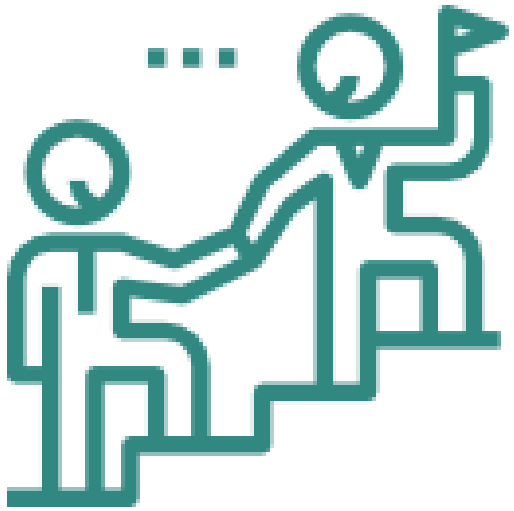
Common Implementation Barriers

Barrier	Closer Look at Barrier	Implementation Challenge
Ineffective or resistant leadership, supervisors; lack of stakeholder support	• No one person responsible for managing change process • Reluctant to change • Lack of supervisor buy-in, staff accountability, coaching/support • Lack of CQI process	• Incomplete program • Minimum adherence to program model. • Lack of training support • Loss of financial support; necessary resources • Emphasis on outcomes before complete implementation
Lack of staff input on program changes	• Lack of representation from all staff positions on committees • Implementation process not shared with staff	• Changes made cannot be sustained • Committee frustration • Implementation process slows
Staff attitude	• Punishment oriented • Fear change; concern it will not last • Prefer their own way	• Do not develop skills & competencies • Interventions sabotaged • Do not use CCPs
Lack of dedicated resources	• Inadequate staffing allocation • Inadequate financial resources • Internal capacity not developed	• No time to coach, provide support • Become overwhelmed with responsibilities • Lack of internal coaches and trainers

Latessa et al., 2016

Approaching these Barriers

- **Educate stakeholders** and understand their interests
- Ensure that supervisors **support** the new approach
- **Train and coach everyone**: do not underestimate the importance of frontline staff
- Acknowledge **agency culture** and **remove barriers**
- Obtain **union buy-in**
- **Invest in fidelity** to support **long-term** success
- **Evaluate!**



Latessa et al. (2016); PEW-MacAruther Results First Initiative

PROGRAM ADAPTATION AND MODIFICATION

Adaptation and Modification

- **MUST** be structured around **essential functions** of program or practice
  - Prevent compromising effectiveness of program or practice
- **Program drift** → no longer evidence-based.
- **Adaptation is appropriate and may be necessary, but only up to a certain point**

Program Drift

- When modifications or adaptations to a program or practice **misalign or move away from essential functions** of the program or practice
- When many adaptations are imposed, **sustainability suffers**
- Adaptations should be done in an **objective manner** based on
  - technical;
  - theoretical; and
  - rigorous evidence of such adaptations
- **Not** based on **subjective stances or individual beliefs**

Research: Adaptation and Modification

Common types of adaptations

- Program content
- Program format
- Program delivery context
- Providing additional information/resources
- Change target population
- Change incentive structure
- Modify training or evaluation process

Common reasons

- Disagreement with content; philosophical issues
- Clarification or emphasis on specific content
- Deletion of components due to lack of time
- Technical difficulties
- Changing delivery styles because they believed different format/process would be better

Issues

- 53% of programs negatively aligned (Moore et al., 2013)
- 63% negatively adapted (Dusenbury et al., 2005)
- 71% of deletions reactive; 82% of component deletions negatively aligned (Rhoades Cooper et al., 2016)

Moore et al., 2013; Rhoades Cooper et al., 2016; Dusenbury et al., 2005)

Adaptation Considerations

- Are the modifications/adaptations necessary? What is **the reason for the adaptation**?
- What are the **essential program/practice functions**? How does the proposed **adaptation impact essential functions**?
- How could **policy or procedure be modified or adapted** to make implementation more successful (with or without adaptations/modifications)?
- How will you **evaluate the adaptation** and its impact on process and outcomes?

Summary

- Understanding EBPs
- Purpose of logic models
- Importance of fidelity
- Implementation process and planning
- Understanding adaptation and program drift

Resources

- National Implementation Research Network (NIRN)
  - www.nirn.fpg.unc.edu
- PEW Charitable Trusts, MacArthur Foundation
  - Evidence-Based Policymaking Series
  - http://www.pewtrusts.org/~/media/assets/2015/06/resultsfirstprograminventorybrief.pdf?la=en
- Justice Research and Statistics Association (JRSA)
  - www.jrsa.org
- Example of EBP and implementation science in Colorado law
  - https://cdpsdocs.state.co.us/epic/EpicWebsite/HomePage/HB13-1129.pdf

References

Bertram, R. M., Blase, K. A., & Fixsen, D. L. (2015). Improving programs and outcomes: Implementation frameworks and organization change. *Research on Social Work Practice, 25*(4), 477-487.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Lowenkamp, C. T., Flores, A. W., Holsinger, A. M., Makarios, M. D., & Latessa, E. J. (2010). Intensive supervision programs: Does program philosophy and the principles of effective intervention matter? *Journal of Criminal Justice*, 38, 368-375.

Taxman, F. S., Pattavina, A., & Caudy, M. (2014). Justice reinvestment in the United States: An empirical assessment of the potential impact of increased correctional programming and recidivism. *Victims & Offenders: An International Journal of Evidence-Based Research, Policy, and Practice, 9*(1), 50-75.

Rudes, D. S., Viglione, J., Lerch, J., Porter, C., & Taxman, F. S. (2014). Build to sustain: Collaborative partnerships between university researchers and criminal justice practitioners. *Criminal Justice Studies: A Critical Journal of Crime, Law and Society*, 27(3), 249-263.

Farrell, J. L., Young, D. W., & Taxman, F. S. (2011). Effects of organizational factors on use of juvenile supervision practices. *Criminal Justice and Behavior*, 38(6), 565-583.

Henderson, C. E., Taxman, F. S., & Young, D. W. (2007). A Rasch model analysis of evidence-based treatment practices used in the criminal justice system. *Drug and Alcohol Dependence*, 93, 163-175.

Van Dyke, M., Blasé, K., Sims, B., & Fixsen, D. (2013). *Implementation drivers: Team review and planning.* Chapel Hill, NC: University of North Carolina Chapel Hill, National Implementation Research Network (NIRN), Frank Porter Graham Child Development Institute.

Blase, K., & Fixsen, D. (2013). *ImpleMap: Exploring the implementation landscape*. Chapel Hill, NC: University of North Carolina Chapel Hill, National Implementation Research Network (NIRN), Frank Porter Graham Child Development Institute.

Fixsen, D.L., Blase, K.A., Naoom, S.F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice, 19*(5), 531-540.

Bertram, R. M., Blase, K. A., & Fixsen, D. L. (2015). Improving programs and outcomes: Implementation frameworks and organization change. *Research on Social Work Practice, 25*(4), 477-487.

Alexander, M. (2011). Applying implementation research to improve community corrections: Making sure that “new” thing sticks. *Federal Probation, 75*(2), 47-51.