

# Is CIT Evidence-Based?

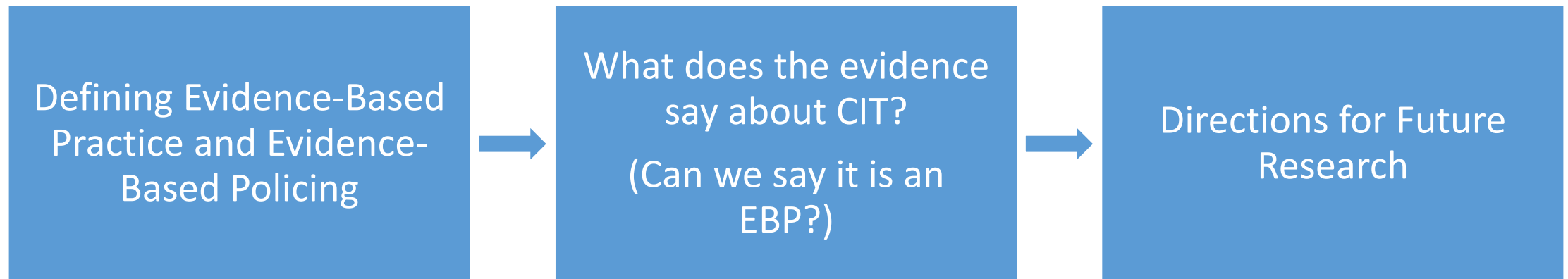
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It depends on two things...

...what you mean by “evidence-based”?

...and for what outcomes?

# Overview



What does it  
mean to be  
*evidence-*  
*based* in  
biomedicine  
and mental  
health?

Evidence-based as a **process**

- Biomedicine: Approach to making medical practice more scientific through the use of the best available evidence from systematic research, with RCTs and meta- analyses/ systematic reviews as the “gold standard”
- Mental health: Process of clinical decision-making that utilizes clinical experience, critically reviewed external research, expert opinion, and client preferences

What does it  
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Evidence-based practice as a **designation**

SAMHSA NREPP criteria

- research has examined behavioral health outcomes of the intervention
- evidence demonstrated in at least one study with experimental design (RCT) or strong quasi-experimental (with pre/post test and comparison group) design
- Results published in peer-reviewed journal or documented in a comprehensive report
- Systematic reviews in the absence of the above are not sufficient

# What is evidence- based policing?

A Process.....

*Evidence-based policing is the use of the best available research on the outcomes of police work to implement guidelines and evaluate agencies, units, and officers. Put more simply, evidence-based policing uses research to guide practice and evaluate practitioners. It uses the best evidence to shape the best practice. (Sherman, 1998)*

Lum & Koper, 2015 add:

- *Evidence-based policing is a decision-making perspective, not a panacea.*
- *It is grounded in the idea that policies and practices should be supported by research evidence and analytics, not blindly determined by them.*
- *It suggests that research is not ignored and that it at least becomes part of the conversation about what to do...*

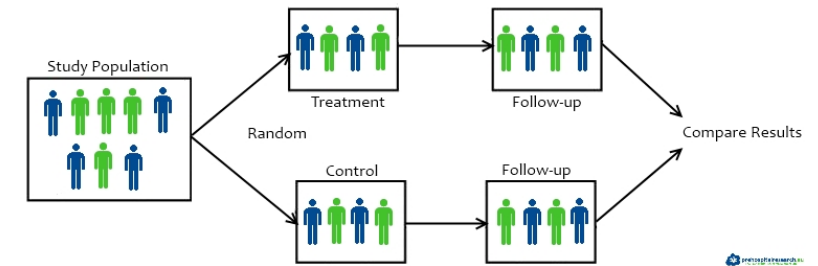


# Experimental Design 101

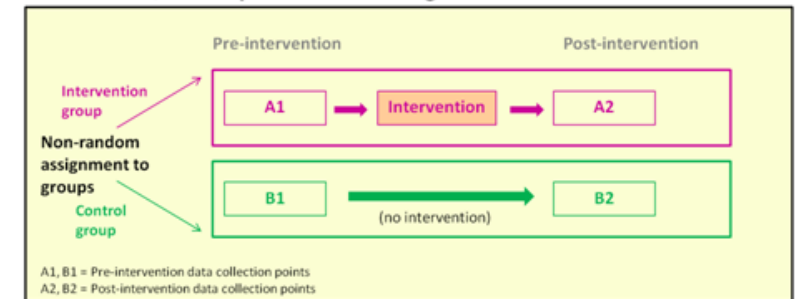
The “gold standard” is the Randomized, Controlled Trial (RCT)

Quasi-experimental design

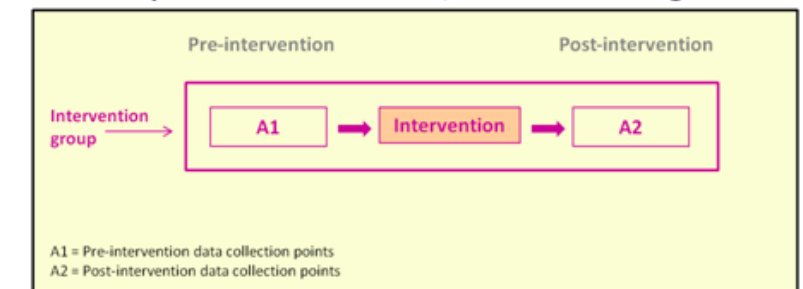
Pre/post test, one group design



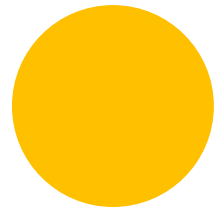
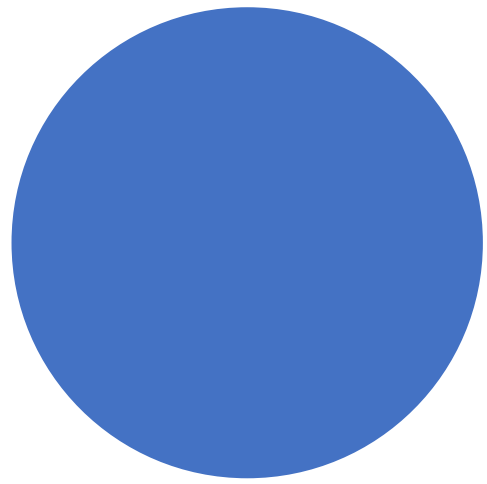
## Classical Quasi-Experimental Design



## Non-Experimental Pre-Test/Post-Test Design







How strong is the  
evidence for CIT?

It depends on the  
outcome of interest...

# Officer-level cognitive and attitudinal outcomes

- Studies using non-experimental and quasi-experimental designs support CIT training as effective for improving officer:
  - Knowledge
  - Attitudes
  - Desire for social distance
  - Self-efficacy for responding

Bahora, Hanafi, Chien & Compton, 2008

Compton, Esterberg, McGee, Kotwicki & Oliva, 2006

Compton et al 2014a

Ellis, 2014

# Officer-level behavioral outcomes

Use of force preferences

Endorsement of effectiveness for de-escalation skills and referral decisions

- Vignette studies comparing CIT and non-CIT officers (Compton et al , 2011; Compton et al 2014a)

Use of force in encounters

Call resolution (MH transport/linkage, arrest, resolve on scene)

- Studies of mental health encounters comparing CIT and non-CIT officers (Compton et al, 2014b; Watson et al , 2010, 2011; Morabito et al, 2012)

More mental health calls identified

Increased transports to MH treatment

Proportion transports voluntary

No change in arrest rates

- Pre and Post CIT implementation design, using dispatch data (Teller et al 2006)

# Subject level outcomes

## SAMHSA Diversion study (Broner et al, 2004)

- Jail diversion by police increased odds of receiving mental health services at 3 and 12 month follow-up
- Diverted individuals at one of the CIT sites experienced reductions in symptoms at 3 month follow-up
- Quasi-experimental non equivalent comparison group study of 8 diversion programs, 3 were police diversion, 2 of the 3 police diversion sites were using the CIT model

# Agency-level outcomes

## Confidence in response

- In a survey of departments, Borum and colleagues (1998) found greater confidence in mental health response among officers in agencies using the CIT model compared to other models of MH response.

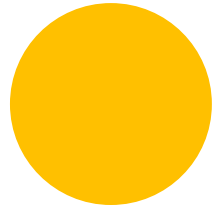
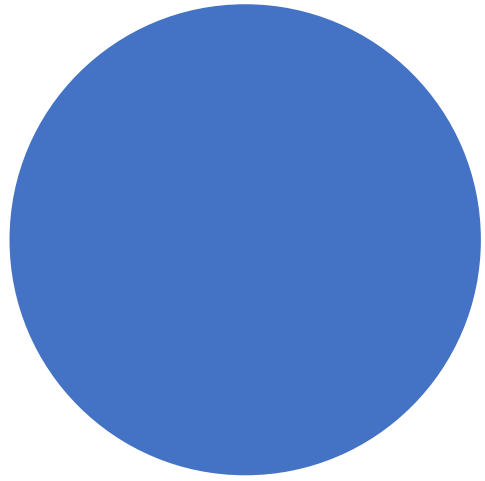
## Efficiency

- Dupont & Cochran (2000) reported reduced time per call following CIT implementation.

# Community- level outcomes

## Cost Savings

- El-Mallakh and colleagues (2014) reported cost savings from deferred hospital and jail costs



So, does the evidence  
support CIT as an EBP?



## CIT and EBP as Designation

- The evidence supports CIT training as an EBP for improving officers' knowledge, attitudes, self-efficacy, and behavioral intentions
- While studies with strong comparison groups suggest CIT/CIT training is effective for impacting officer behavior (use of force, arrest, mental health linkage) research to date does not meet criteria for EBP designation.
- Existing evidence for call subject, organizational, and community outcomes is limited.



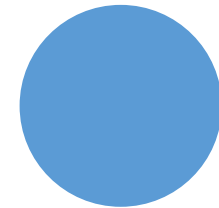
CIT and EBP as  
process



- Need for a CIT Model Fidelity Measure
- Examination of subject-level outcomes
- Examination of system- and population-level outcomes

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## Directions for future research



# Discussion & Questions

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Thank you!

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