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← Training Institute for
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Westin Pasadena | Pasadena, California

Sustainability

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July 29, 2015

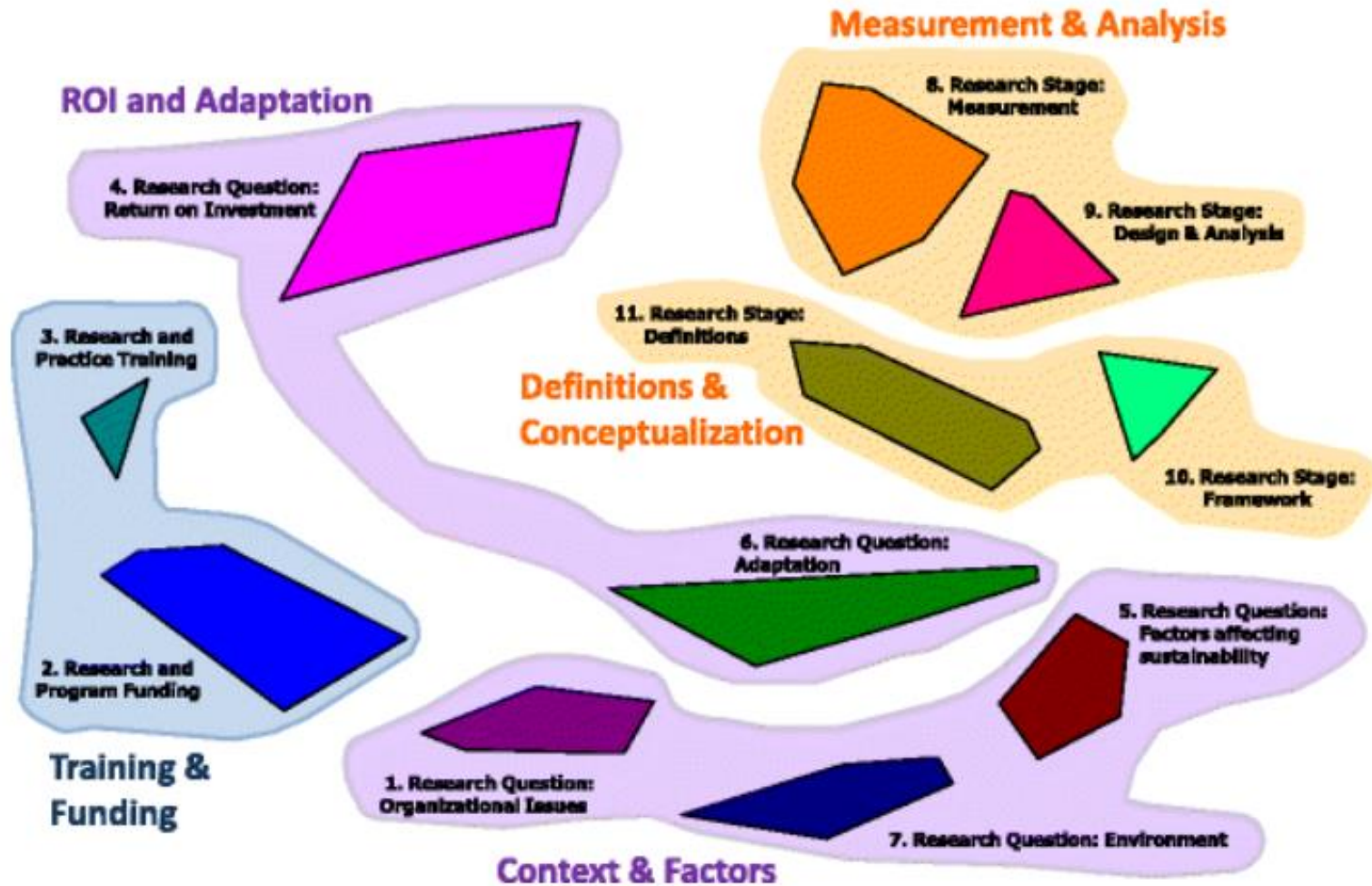


Outline

- Introduction
- A Dynamic Approach
- Implications for Research



Sustainability Research Landscape



Proctor et al. (2015) Sustainability of evidence-based healthcare: research agenda, methodological advances and infrastructure support. *Implementation Science*

RH



Defining terms

Different terms? Or different concepts?

- Sustainability
 - Fidelity
 - Routinization
 - Institutionalization
 - Assimilation
 - Continued use



Conceptualizing Sustainability

- Sustained use of the intervention?
 - Continued use with fidelity?
 - Use as evolved/ adapted over time?
- Sustained improved care?
- Sustained org capacity?



Threshold questions

What constitutes “sustained?”

- What degree of use?
- How long a use?



Priority research questions

1. What is the value of sustainability? (reach, health benefits?)
2. Do interventions vary in sustainability?
3. Sustainability and fidelity:
 - What factors trigger adaptation? (Healthcare environment, efficiency needs such as cumbersome interventions, population characteristics, new evidence & technology (e.g., film to digital mammography)).
4. What theories, frameworks, and models best explain & predict sustainability?



Priority research questions

5. What contextual factors affect sustainability?
How to sustain in low resource health settings?
How to plan/ design for sustainability?



Towards A Dynamic View of Sustainability



Evidence from the D and I Field

- Service systems are constantly changing
- EBPs are being adapted all the time
- Consumers/patients/providers vary dramatically
- EBPs are not one-size fits all
- Implementation is a process
- Fidelity ≠ Optimal Outcomes



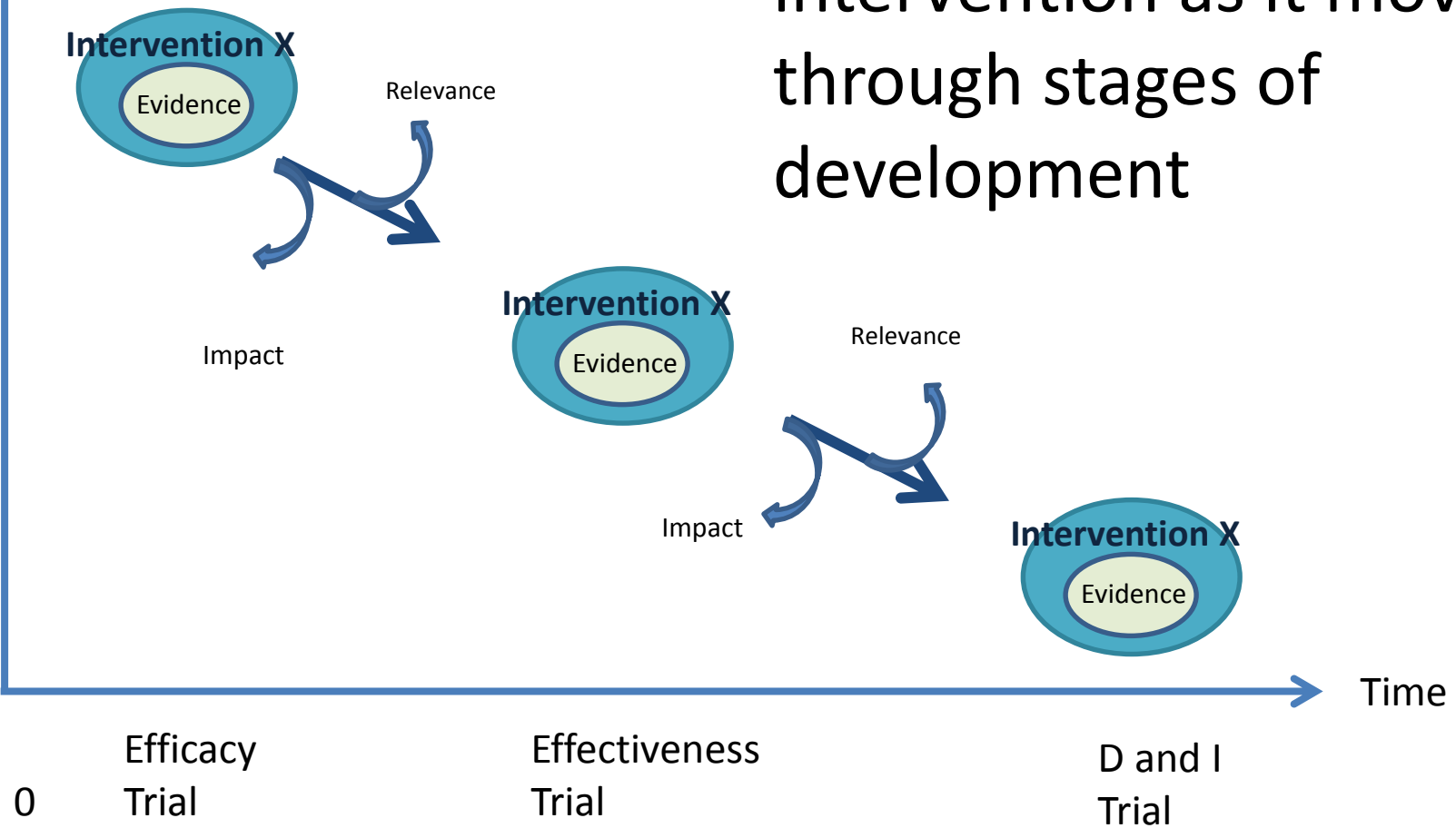
Valuing Consistency

ITV Development → Efficacy → Effectiveness → Implementation



Expected Effect

“Voltage Drop” of an intervention as it moves through stages of development



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Efficacy Trial

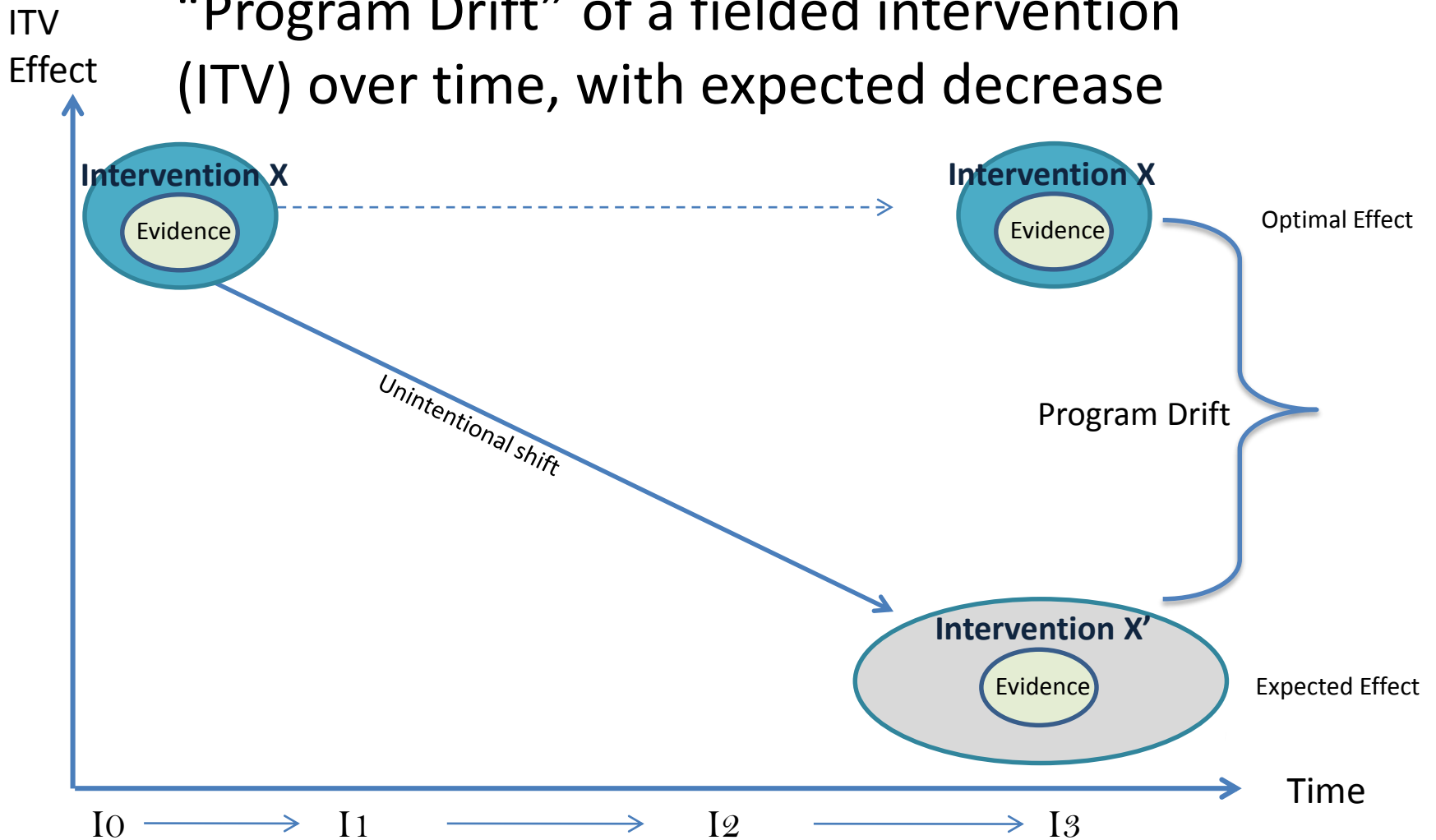
Effectiveness Trial

D and I Trial

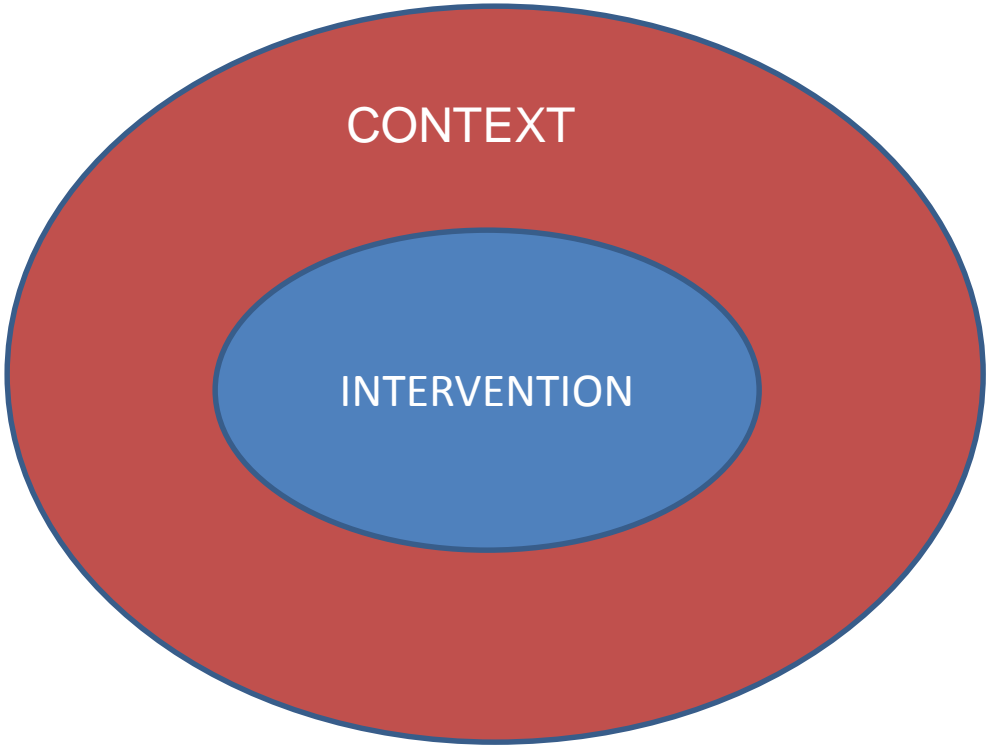
Time



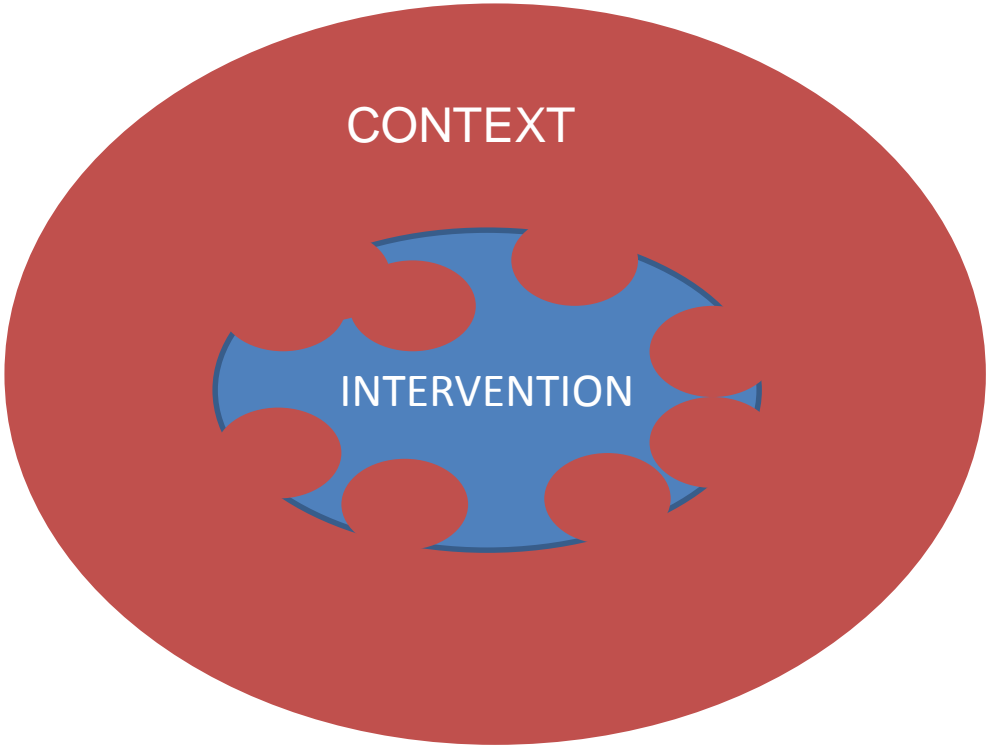
“Program Drift” of a fielded intervention (ITV) over time, with expected decrease



Relative Weights?



A Natural Process

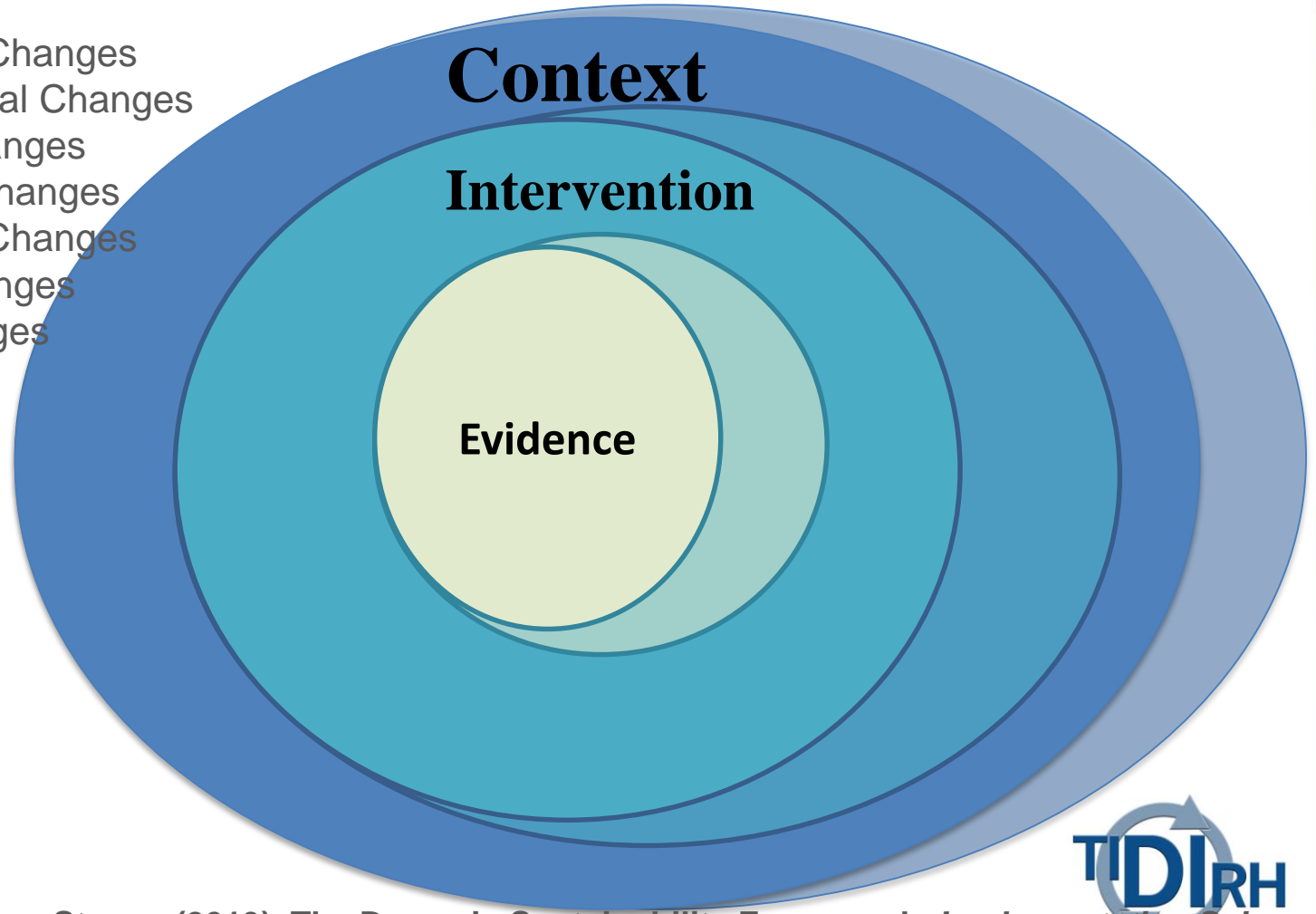


Adaptation is Inevitable...



Emphasizing Multi-level, Multi-Domain Change

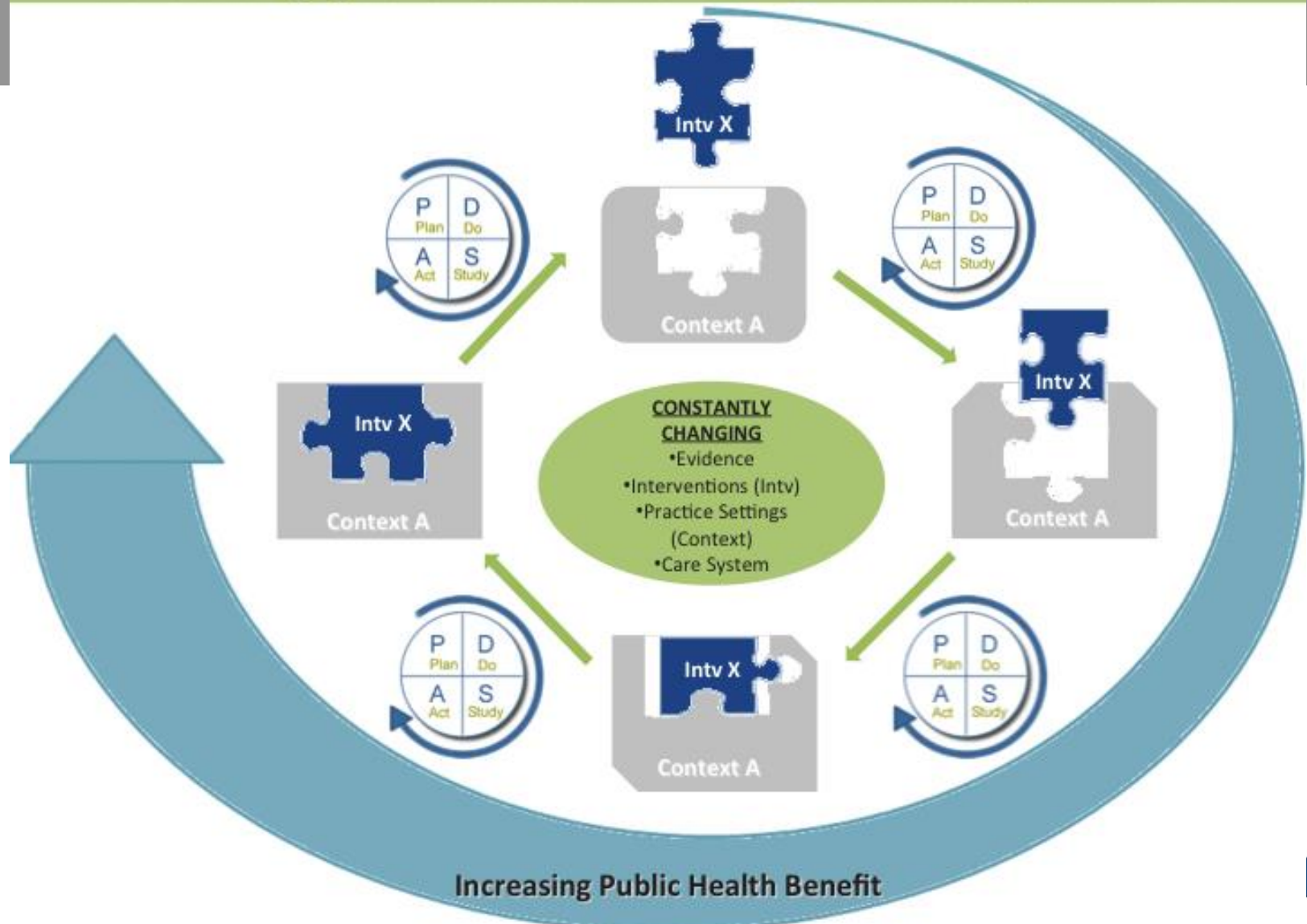
- Evidentiary Changes
- Environmental Changes
- Practice Changes
- Personnel Changes
- Knowledge Changes
- System Changes
- Policy Changes



Chambers, Glasgow, Stange (2013), The Dynamic Sustainability Framework. *Implementation Science*



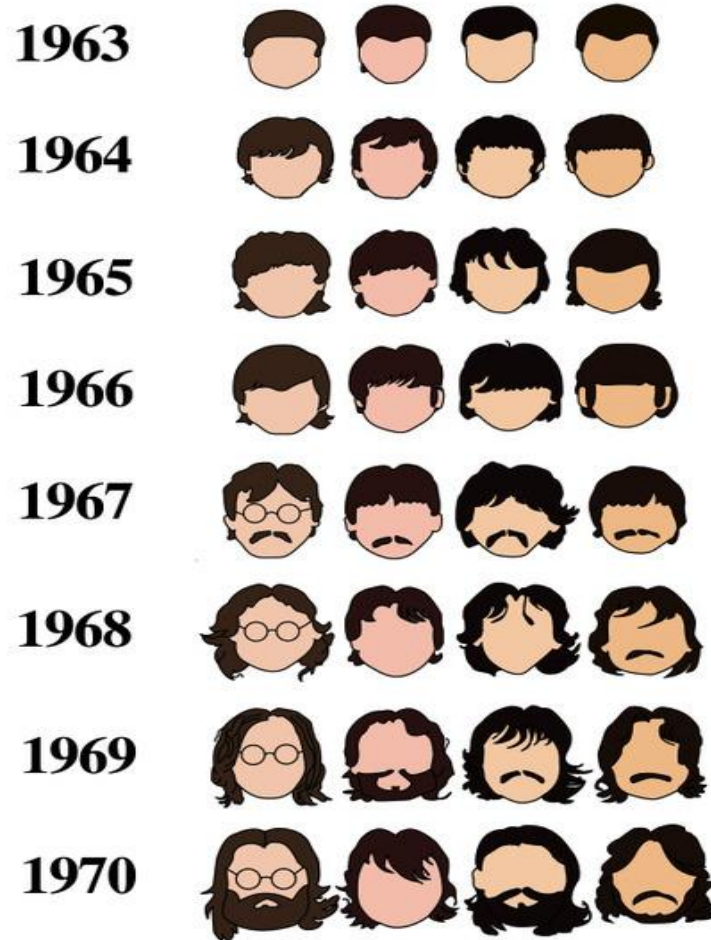
The DSF: Managing the Fit Between an Intervention and Context to Optimize Benefit



Chambers, Glasgow, Stange (2013), The Dynamic Sustainability Framework. *Implementation Science*



Sustainability or Evolution?



Fidelity vs Adaptation?



On-Going Studies (NIMH)

- Lisa Saldana, “The Stages of Implementation Completion for Evidence-Based Practice”
- Joan Cook, “Sustained Use of Evidence-Based PTSD Treatment in VA Residential Settings (follow-up of VA implementation)”
- Greg Aarons, “Mixed-Methods Study of EBP Sustainment in a Statewide Service System”
- Greg Aarons, “Interagency Collaborative Teams to Scale-up Evidence-based Practice”



Take Home Messages

- Assessment Tools
- Traditional view of sustainability likely to be limited.
- Great opportunity for further research:
 - Understanding timeframe
 - Adaptation/Evolution versus Fidelity
 - Optimizing the effect of the intervention



Suggested References

- Chambers DA, Glasgow RE, Stange KC. The Dynamic Sustainability Framework: addressing the paradox of sustainment amid ongoing change. *Implementation Science* 2013.
- *Scheirer, MA, Dearing JW. An agenda for research on the sustainability of public health programs. *Am J Public Health*. 2011; 101(11):2059-67.
- [Shediac-Rizkallh MC, Bone LR.](#) Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy. [Health Educ Res.](#) 1998 Mar;13(1):87-108.
- *Simpson DD. Implementing sustainable oral health behavioral and social interventions. J Public Health Dent. 2011;71:S84-S94*
- Stirman SW, Kimberly J, Cook N, Calloway A, Castro F, Charns M. The sustainability of new programs and innovations: a review of the empirical literature and recommendations for future research. *Implementation Science. 2012. Volume 7.*



Questions?



Thanks

