

Rethinking the dynamics of prevention: mobilisation, implementation, and embeddedness in open systems

CARL MAY

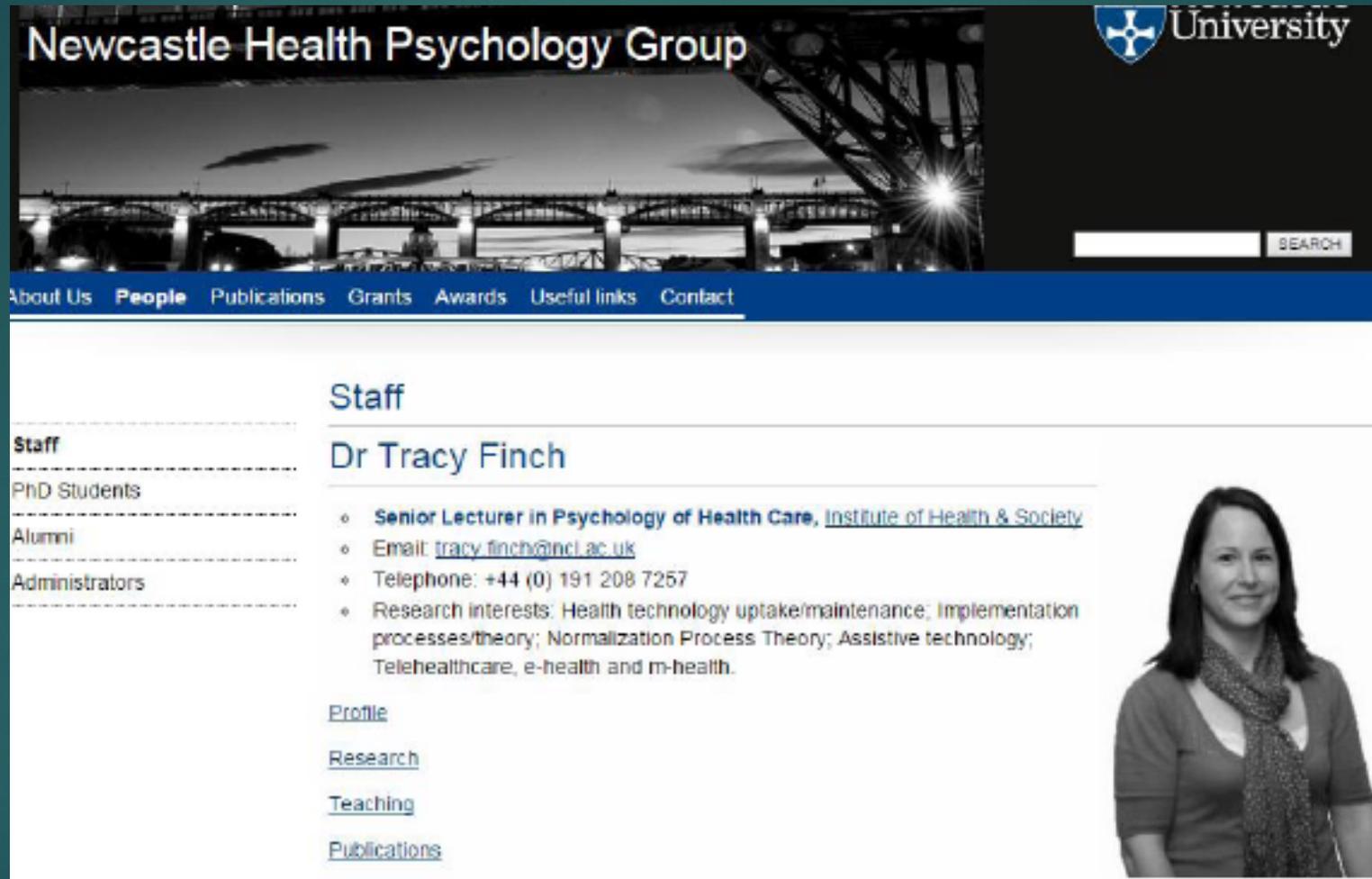
UNIVERSITY OF SOUTHAMPTON, UK

My task today

- ▶ Identify parallels between Implementation and prevention science
 - ▶ Translational research
- ▶ Characterise prevention initiatives as implementation problems
 - ▶ Translational gaps
- ▶ Introduce a theoretical framework for understanding implementation processes
 - ▶ Normalization Process Theory (NPT)

My wonderful collaborator in building NPT....

3



The screenshot shows the website for the Newcastle Health Psychology Group at Newcastle University. The header features the group name and the university logo. A navigation menu includes 'About Us', 'People', 'Publications', 'Grants', 'Awards', 'Useful links', and 'Contact'. The main content area is titled 'Staff' and highlights 'Dr Tracy Finch'. To the left, there is a sidebar with links for 'Staff', 'PhD Students', 'Alumni', and 'Administrators'. Dr Finch's profile includes her title as Senior Lecturer in Psychology of Health Care, her email (tracy.finch@ncl.ac.uk), her telephone number (+44 (0) 191 208 7257), and her research interests in health technology uptake, implementation processes, Normalization Process Theory, assistive technology, telehealthcare, e-health, and m-health. A portrait photo of Dr Finch is shown on the right side of her profile.

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KEEP
CALM
AND
THINK ABOUT
THEORY

“THERE IS NOTHING
SO PRACTICAL AS A
GOOD THEORY”

KURT LEWIN

I. Parallels

Prevention¹

- ▶ Building robust theories to inform intervention design, behaviour change, implementation, and evaluation.
- ▶ Translating evidence into policy and practice.
- ▶ Enacting change.

Implementation²

- ▶ Building robust theories to inform intervention design, behaviour change, implementation, and evaluation.
- ▶ Translating evidence into policy and practice
- ▶ Enacting change.

2. Parallels

Prevention³

- ▶ Translating carefully controlled experimental research into interventions that work in the messy world of 'real life.'

Implementation⁴

- ▶ Translating carefully controlled experimental research into interventions that work in the messy world of 'real life.'

T1 research seeks to **move a basic discovery into a candidate health application**;

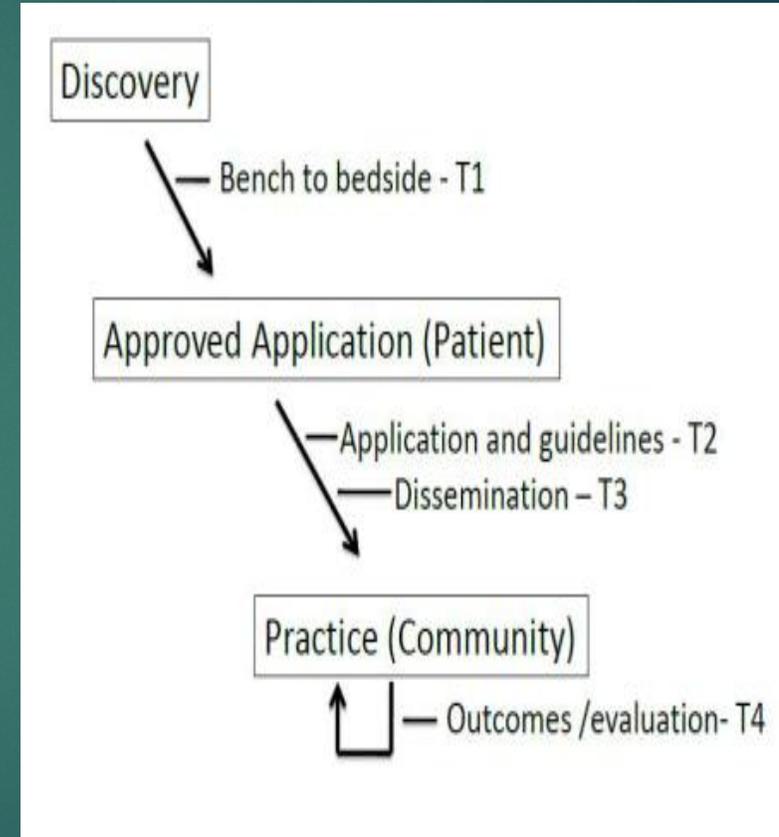
T2 research **assesses the value of T1 application for health practice** (leading to the development of evidence-based guidelines);

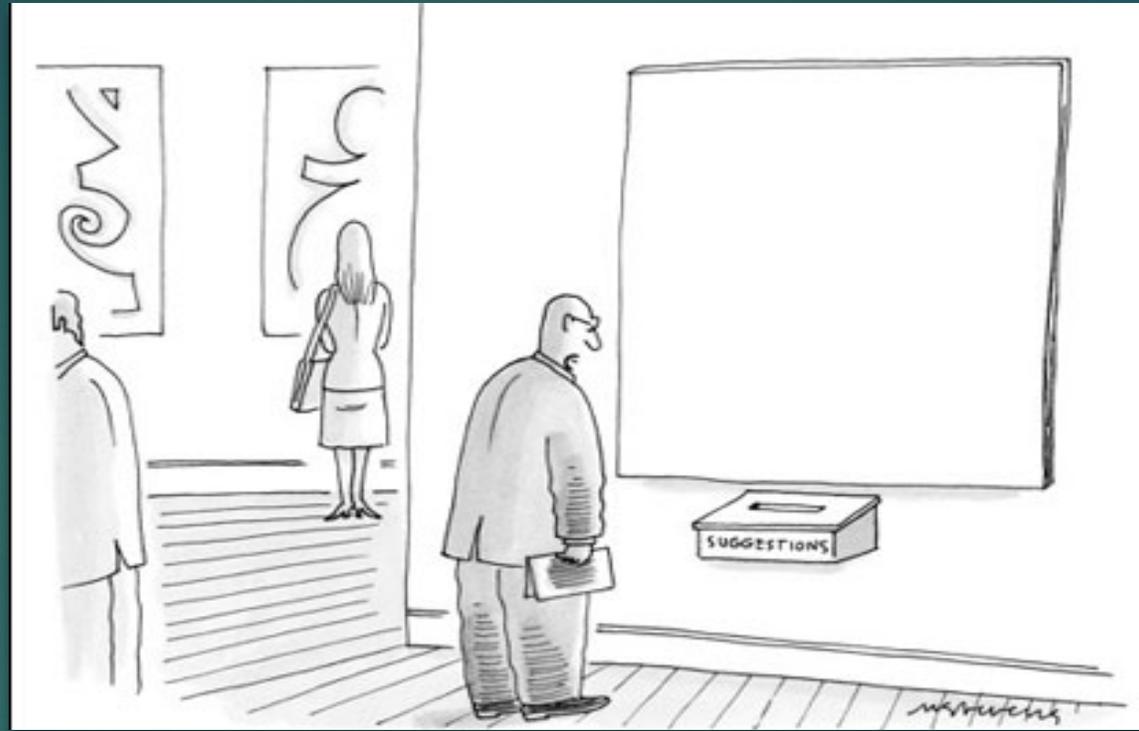
T3 research attempts **to move** (evidence-based guidelines) **into health practice, through delivery, dissemination, and diffusion research**;

T4 research seeks to **evaluate the “real world” health outcomes** of a T1 application in practice.

Used by kind permission: Pienta, K. <http://kenpienta.com/lab/translational-research/> (accessed 12 September 2013)

MEDICAL MODEL OF TRANSLATIONAL RESEARCH





Implementation science is about the application of behavioural and social sciences to the very practical problem of getting innovations in treatment, service delivery and organisation into everyday practice

What is implementation?

- ▶ Implementation includes *any* deliberately initiated attempt to introduce new, or modify existing, patterns of collective action in health care or some other formal setting.
- ▶ Deliberate initiation means that an intervention is: institutionally sanctioned; formally defined; consciously planned; and intended to lead to a changed outcome.
- ▶ Participants may seek to modify the ways that people think, act and organize themselves or others, they may seek to initiate a process with the intention of creating a new outcome.

What is to be implemented?

Interventions

- ▶ may be intended to change *behaviour* and its intended *outcomes* (e.g. strategies for making ‘expert patients’; or using telemedicine systems)
- ▶ may be intended to change *expertise* and *actions* (e.g. devices; or decision-making tools and clinical guidelines)
- ▶ may be intended to change the *procedures* enacted to achieve *goals*. (e.g. electronic health records, ordering systems)

Much implementation research focused on events within organisations....

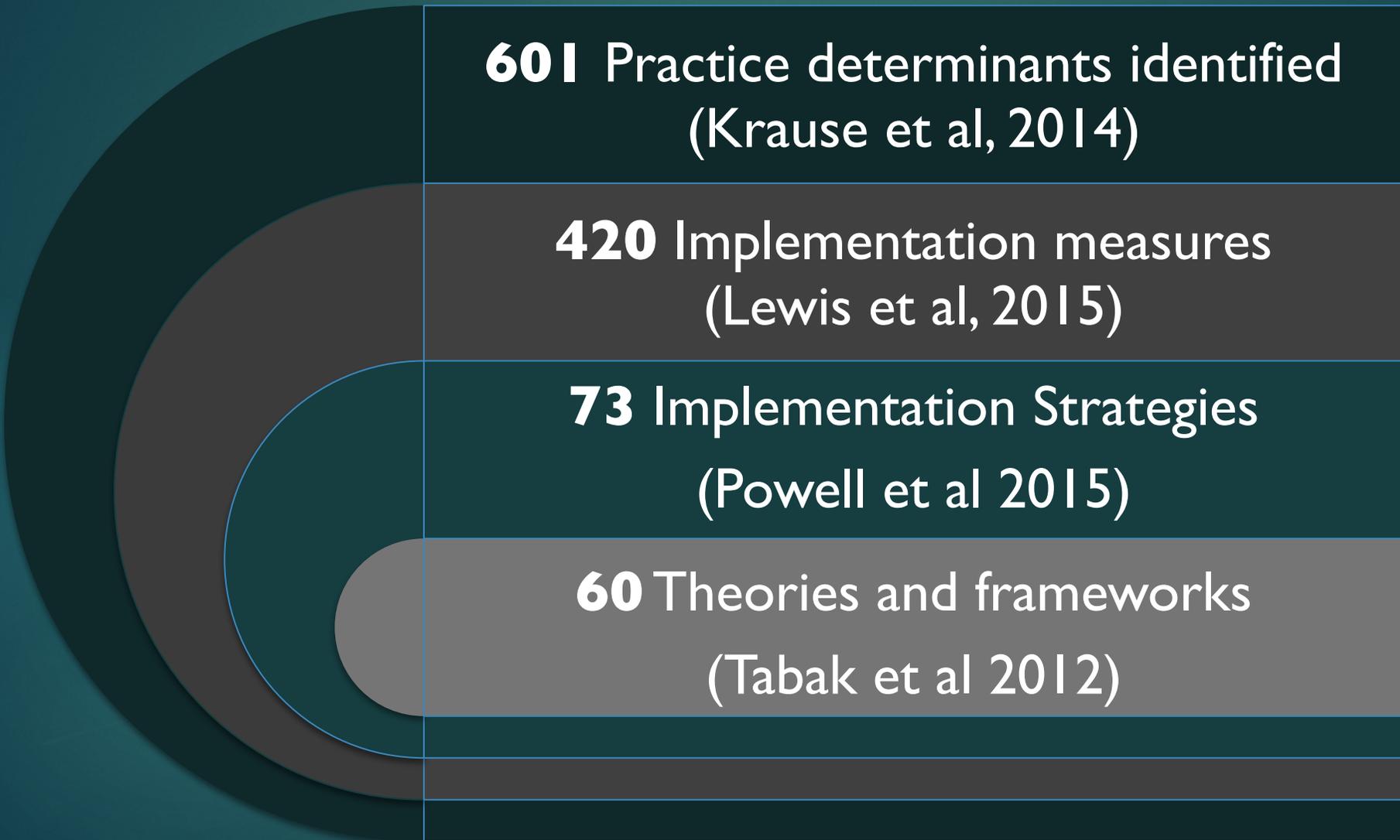
...but in research on *open systems*, implementation is often about relationships between organisations and diffuse, fragmented, target populations

‘action in response to a call (or desire, or expectation, or command) for change through which people are asked (or want, or are expected, or are instructed) to do something new or different’
(May et al., 2016).

The implementation core....



Implementation research is a crowded field



601 Practice determinants identified
(Krause et al, 2014)

420 Implementation measures
(Lewis et al, 2015)

73 Implementation Strategies
(Powell et al 2015)

60 Theories and frameworks
(Tabak et al 2012)

DEBATE

Open Access

Towards a general theory of implementation

Carl May

Abstract

Understanding and evaluating the implementation of complex interventions in practice is an important problem for those who must operationalize them beyond formal theory. This paper sets out core

Implementing, Embedding, and Integrating Practices: An Outline of Normalization Process Theory

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Newcastle University
- **Tracy Finch**
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ABSTRACT

Understanding the processes by which practices become n

BMC Health Services Research

Bio

Research article

A rational model for assessing and evaluating complex interventions in health care

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Open

To understand implementation we need to analyse collective action – what people *do, together*, not what they *intend*.

Implementation

(the work of enacting intervention components in 'real life' settings)



Embedding

(phase transition in which intervention components are routinely incorporated in everyday practice)



Integration

(the work of sustaining intervention components in everyday practice)

It's all about the work

- ▶ What is the work? (How is a practice made *coherent* by its users?)
- ▶ Who does the work? (How do people and groups come to *participate* into a complex intervention?)
- ▶ How does the work get done? (How is a complex intervention *enacted* in practice?)
- ▶ Why did the work happen like that? (How is a complex intervention *monitored* by its users?)

Core concepts: How users interact with intervention components – *capability*

Interactional workability: defines how a complex intervention is practically operationalized by the people using it

Skill-set workability: defines the distribution and conduct of work associated with a complex intervention in a division of labour

Relational integration: defines knowledge and work about a complex intervention is mediated and understood within networks.

Contextual integration: the realization of resources of a complex intervention within an organizational domain.

Core concepts: what do participants in implementation processes *do*? Contributions

Coherence: defines and organizes the components of a complex intervention

Collective Action: defines and organizes the enacting of a complex intervention

Cognitive Participation: defines and organizes the people implicated in a complex intervention

Reflexive Monitoring: defines and organizes assessment of the outcomes of a complex intervention

Effective implementation interventions depend on *action*

		Spread of NPT constructs within intervention															
		Coherence			Cognitive participation				Collective action				Reflexive monitoring				
		Individual specification	Communal specification	Internalization	Initiation	Legitimation	Enrolment	Activation	Interactional workability	Relational integration	Contextual integration	Skill set workability	Systematization	Individual appraisal	Communal appraisal		
Increasing intervention effectiveness ↑	NPT Constructs																
	EPOC Professional intervention																
	Patient-mediated interventions																
	Audit and feedback																
	Educational outreach visits																
	Reminders																
	Educational meetings																
	Distribution of educational materials																
	Marketing																
	Local consensus processes																
Mass media																	
Local opinion leaders																	

To cite: Johnson MJ, May CR. Promoting professional behaviour change in healthcare: what interventions work, and why? A theory-led overview of systematic reviews. *BMJ Open* 2015;5:e008592. doi:10.1136/bmjopen-2015-008592

Core concepts: Relationships between capability, contribution and context

– Potential and Capacity

Capacity: social structural resources (norms, roles) available to agents

Contribution: agency expressed through coherence; participation; action; monitoring

Potential: social cognitive resources (organisational readiness, commitment) available to agents

Capability: workability and integration of the implementation object

Social norms and smoking bans on campus: interactions in the Canadian university context

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22

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The Strengthening Families Programme (SFP) 10–14



International Journal of
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and Public Health

Article

Are Brief Alcohol Interventions Adequately Embedded in UK Primary Care? A Qualitative Study Utilising Normalisation Process Theory

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Abstract: Despite substantial evidence for their effectiveness, the adoption of alcohol and brief interventions (ASBI) in routine primary care remains inconsistent. Financial schemes were introduced in England between 2008 and 2015 to encourage their delivery. Normalisation Process Theory-informed interviews to understand the barriers and experiences by 14 general practitioners (GPs) as they implemented ASBI during this period. Multiple factors shaped provision. GPs were broadly cognisant and supportive of providing alcohol interventions (coherence) but this did not necessarily translate into personal investment in their delivery (cognitive participation). This lack of investment shaped how GPs operated such “work” in day-to-day practice (collective action), with ASBI mostly delegated to receptionists. GPs reverting to “business as usual” in their management and treatment of problem drinkers.

Questionnaire data were collected during a period in 2005. Quantitative data were collected from the 10–14 Parent/Caregiver Survey Questionnaire, the Strengthening Families Programme 10–14 Parent/Caregiver Survey Questionnaire and the Strengthening Families Programme 10–14 Parent/Caregiver Survey Questionnaire. Questionnaire data were

ELSEVIER

Journal homepage: www.elsevier.com/locate/ssmpn

An application of Extended Normalisation Process Theory in a randomised controlled trial of a complex social intervention: Process evaluation of the Strengthening Families Programme (10–14) in Wales, UK

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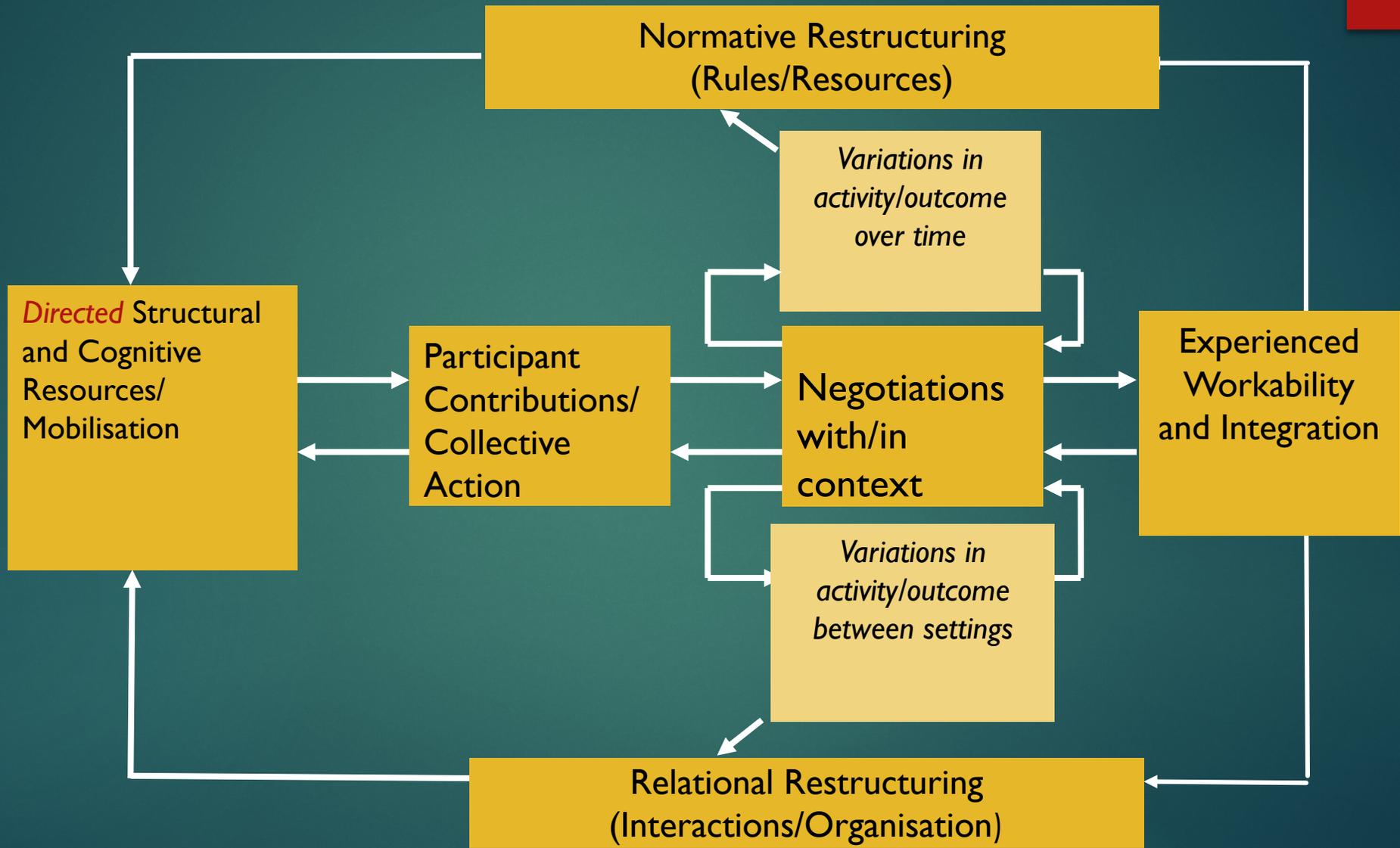
Randomised controlled trial

ABSTRACT

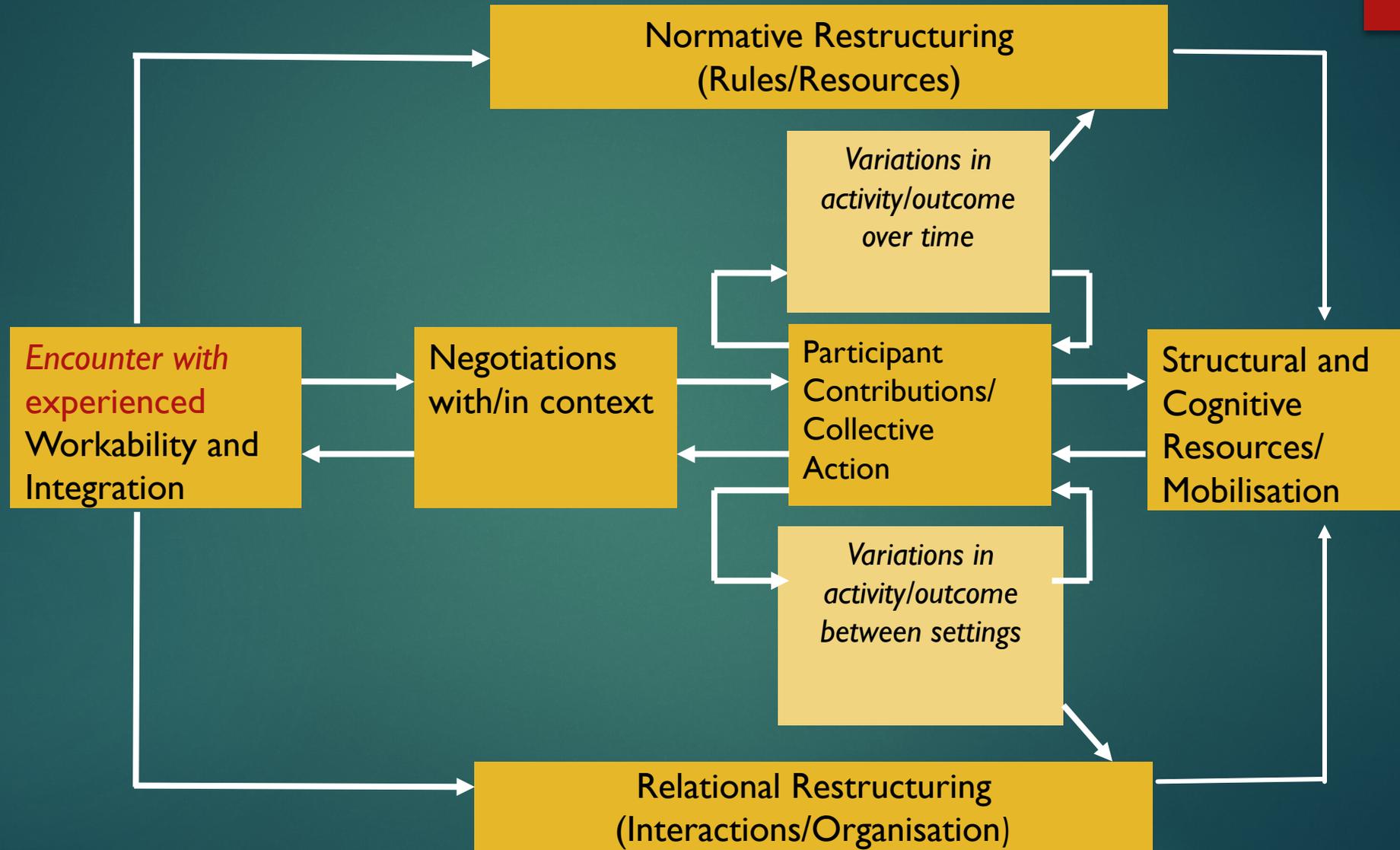
Purpose: Process evaluations generate important data on the extent to which interventions are delivered as intended. However, the tendency to focus only on assessment of pre-specified structural aspects of fidelity has been criticised for paying insufficient attention to implementation processes and how intervention-context interactions influence programme delivery. This paper reports findings from a process evaluation nested within a randomised controlled trial of the Strengthening Families Programme 10–14 (SFP 10–14) in Wales, UK. It uses Extended

Implementation is a directed process, but Segrott et al (2017) question this...

- ▶ *ENPT places considerable emphasis on the notion of implementation as an expression of agency. However, the agents in question appear to be mainly conceptualised as professional practitioners (e.g. nurses), rather than the participants who receive interventions. There is scope to consider further how the key constructs of ENPT can be applied to understand how participant (and non-participant) agency may shape whether interventions become integrated and embedded within delivery systems.*



Experienced implementation involves encounters with intervention components the management of normative explanations associated with them



Robust understanding of implementation processes leads us to:

- ▶ Change the things that people *do* rather than the things that they *believe*.
- ▶ Change the rules, resources, and relationships that they mobilize for action.
- ▶ Consider action *in context*, where contexts are dynamic players rather than obdurate obstacles.

Thank you!



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