

Using Behavioural Science to Enable Learning Organisations

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Outline of the presentation

01 Definitions

What do we mean by
'learning organisation'?

02 The value of a systems perspective

Connecting systems
approaches to behavioural
approaches for complex
problems

03 Using behaviour change frameworks

How behaviour change
frameworks support
implementation efforts

04 Sustaining innovation in organisations

Considerations for sustaining
implementation as an
organisational innovation

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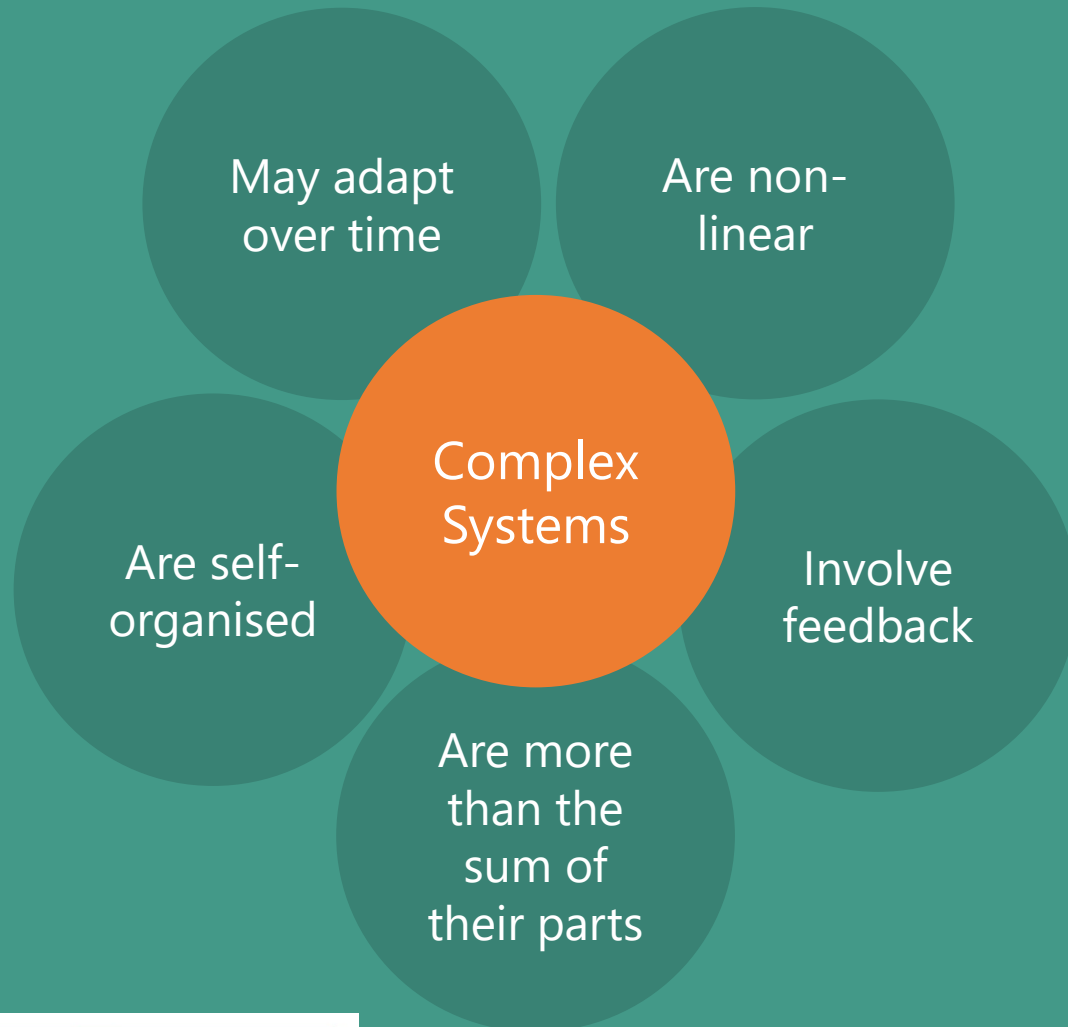
Defining a 'learning organisation'



Narrow definition:

An organisation that can reflect on its activities and adjust them in a timely way to achieve its objectives

Organizational change is a 'wicked' problem



Organisational or behavioural change

“From years of study, I estimate today more than 70 per cent of needed change either fails to be launched, even though some people clearly see the need, fails to be completed even though some people exhaust themselves trying, or finishes over budget, late and with initial aspirations unmet.” - John Kotter

- Implementing any organisational change requires understanding the complex ways in which people influence, and are influenced by
 - each other
 - their environment
 - processes such as communication systems and incentive structures
- Change management models and methodologies rarely represent behaviour in a way that behavioural and implementation scientists would recognise
- Need to find a way to fill the gap between change management and behavioural/implementation science models

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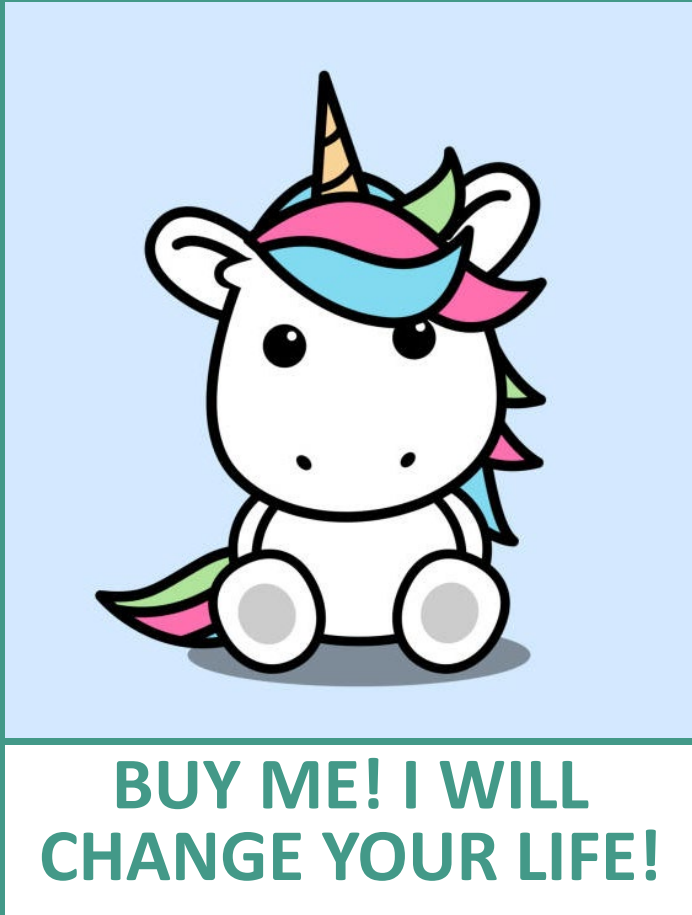
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Slaying the unicorn



- Behavioural Science Unicorn; an intervention that returns very large impact via a simple intervention:
 - Nudge-based interventions
 - Narrow in scope, usually a form of environmental manipulation
 - Often 'default' type interventions (opt-out of pensions, donor status)
 - Restriction interventions (e.g., prescribing)
- Limited impact on complex problems

Bullying and harassment in organisations

Academics

Hundreds of academics at top UK universities accused of bullying

Senior professors among 300 people alleged to have bullied students and colleagues

Hannah Devlin and Sarah Marsh
Fri 28 Sep 2018 12.30 EDT

9,163



▲ Current and former academics told the Guardian they had experienced aggressive behaviour and career sabotage. Photograph: Alamy

Hundreds of academics have been accused of bullying students and colleagues in the past five years, prompting concerns that a culture of harassment and intimidation is thriving in Britain's leading universities.

- Typical 'wicked problem' in an organisation
- Usual responses assume that the problem is a knowledge issue (*people behave badly because they don't know it's wrong*):
 - Policy development
 - Monitoring
 - Education and training
- Usual outcomes
 - Increased awareness
 - No change or increased behaviour rates
- What kind of behavioural science can be used to overcome these limitations

Behavioural in Systems Mapping

- Method for understanding behaviour in complex systems
- Uses qualitative participatory methods to elicit understanding of a behaviour from stakeholders with different experiences and expertise
- Synthesises data from different perspectives to create a visual representation of the causal influences on the expression of the target behaviour

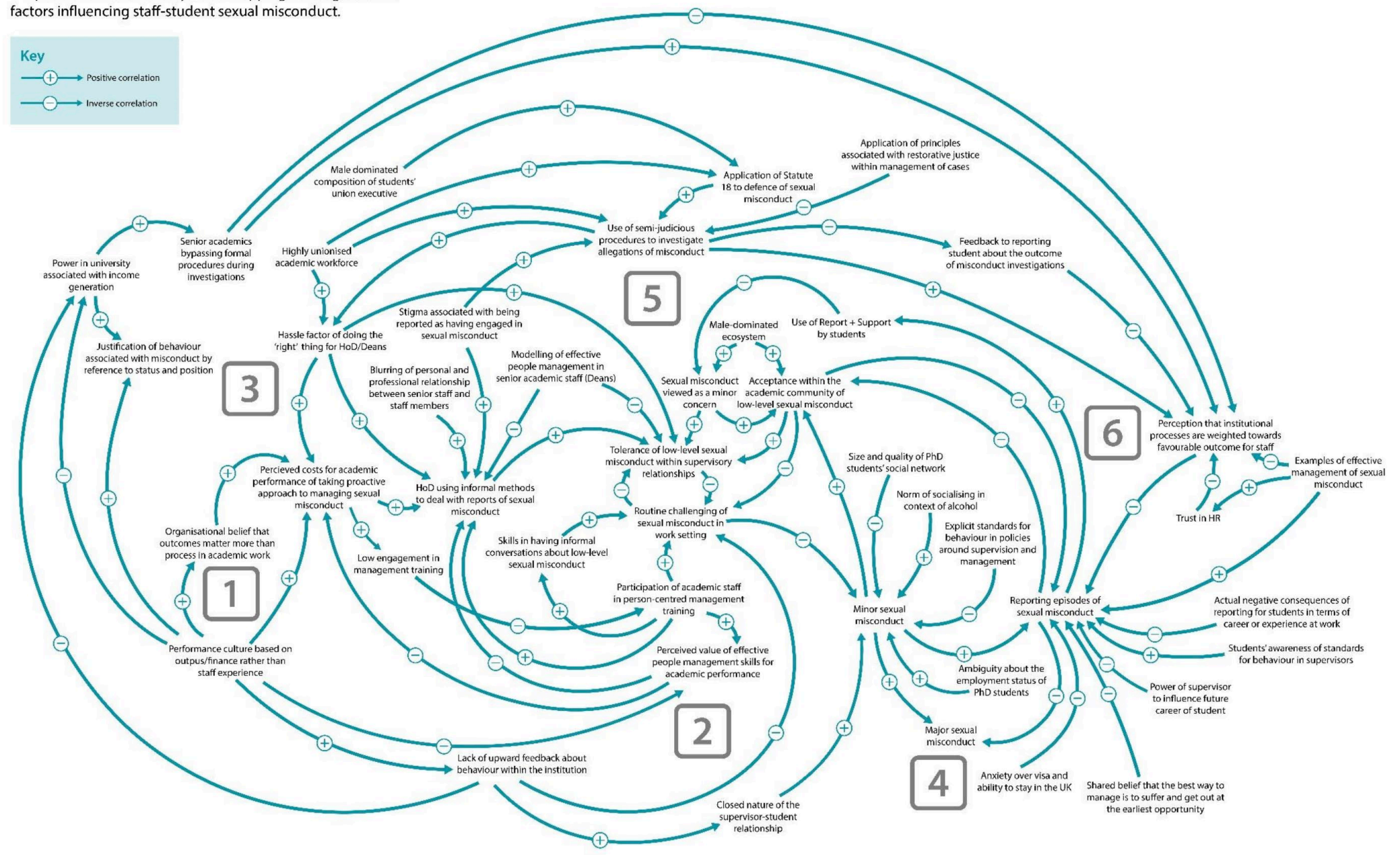


Behavioural Systems Map

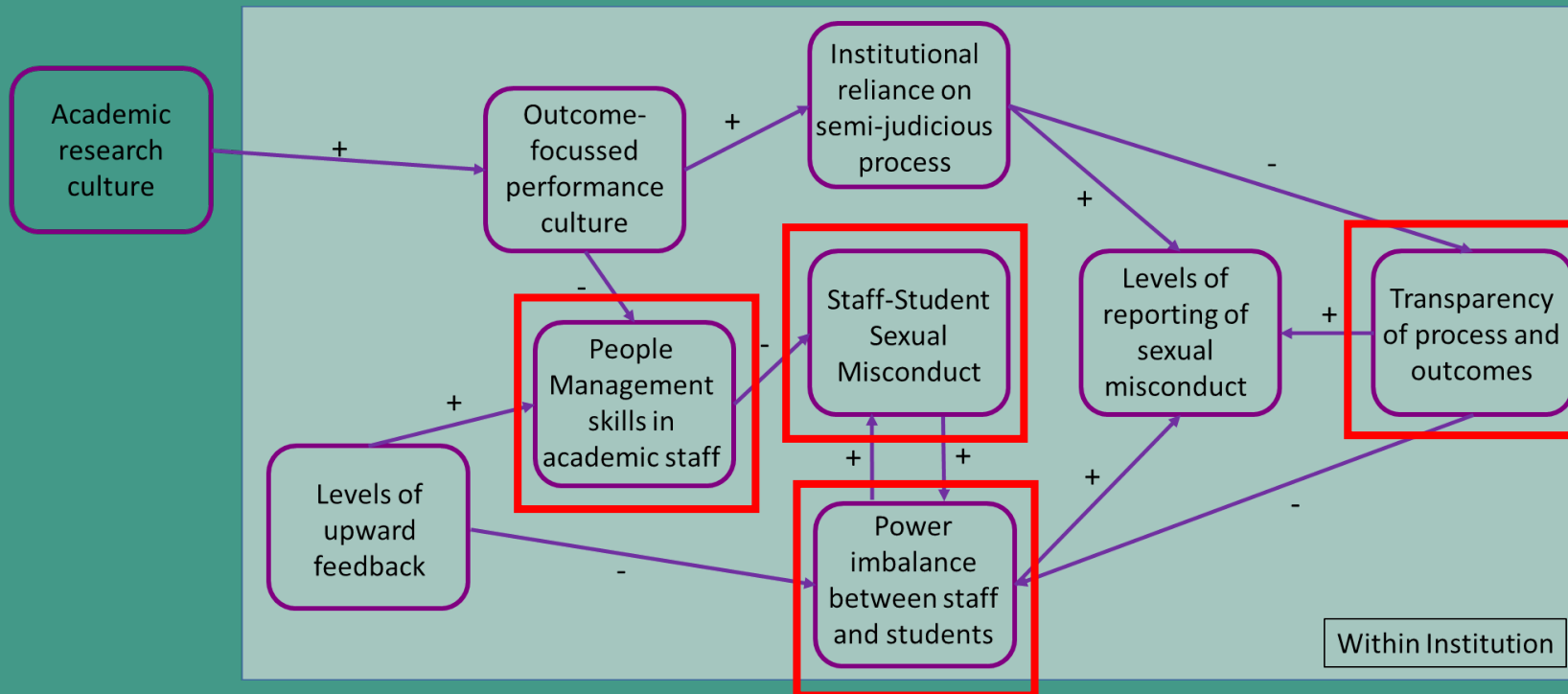
Output from Behavioural Systems Mapping investigation into factors influencing staff-student sexual misconduct.

Key

- (+) Positive correlation
- (-) Inverse correlation



Systems maps help understand wicked problems



Interventions that focus on individual behaviour have failed because they do not address how the behaviour is a product of power, procedure, policy and internal and external cultural norms

Previous interventions focused on changing behaviour of the 'perpetrator'

Systems analysis led to 28 recommendations for behavioral interventions to bring about systems change – successfully changing a single behaviour may require a suite of coordinated interventions

Where are we now?

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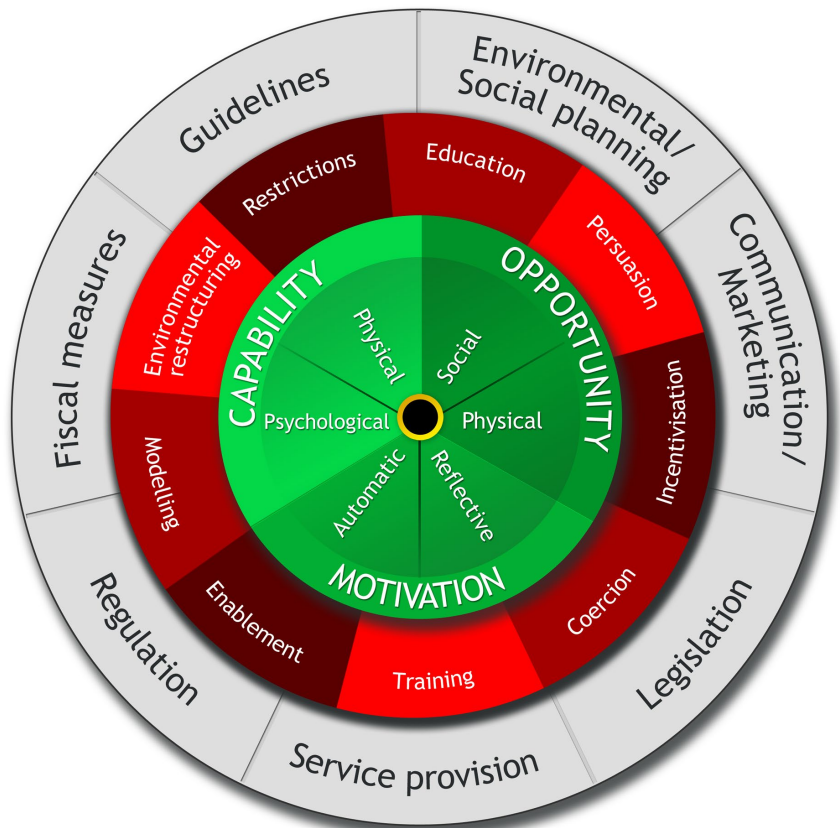
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Implementation depends on behaviour change

- Systems analysis helps us understand where to intervene
- We may need to intervene to change the behaviour or multiple types of **people in roles** at different levels in **organisations, networks and systems**
 - Professionals, support staff
 - Commissioners, managers
 - Policy makers
 - Others in health systems, local or national government, schools, commercial workplaces
- Behaviour change frameworks can help develop a suite of effective targeted interventions

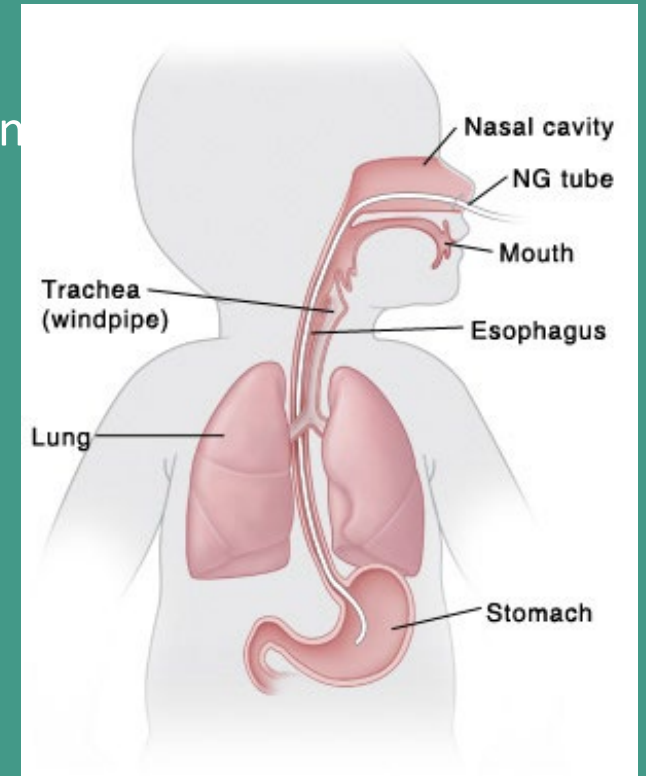
The Behaviour Change Wheel Framework



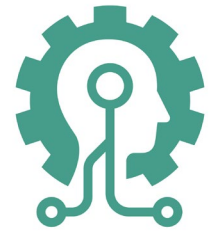
- Synthesis of 19 frameworks across behavioural and social sciences
- Integrates a model of behaviour with a systematic approach to designing interventions at different levels
- Pragmatic approach for non-specialist and specialist application

National Patient Safety Alerts: Nasogastric Feeding

- **Never Events:** specific serious untoward incidents that can cause serious harm but should be avoidable if national guidance is followed
- One example is: 'Naso or orogastric tubes placed in the respiratory tract rather than the gastrointestinal tract and not detected prior to commencing feeding or other use'
- Acutely unwell patients are preferably fed through fine bore nasogastric tubes
- However, patients may tolerate accidental intubation of the trachea and bronchi without obvious distress
- If the tube misplacement is not spotted, and feeding is commenced, the consequences can be serious (e.g. pneumothorax, severe pneumonia etc)
- Correct NG tube placement is mainly decided by x-rays
- Misreading of X-rays is the main cause of food introduction into the lung. pH testing of aspirate far more accurate, but rarely performed

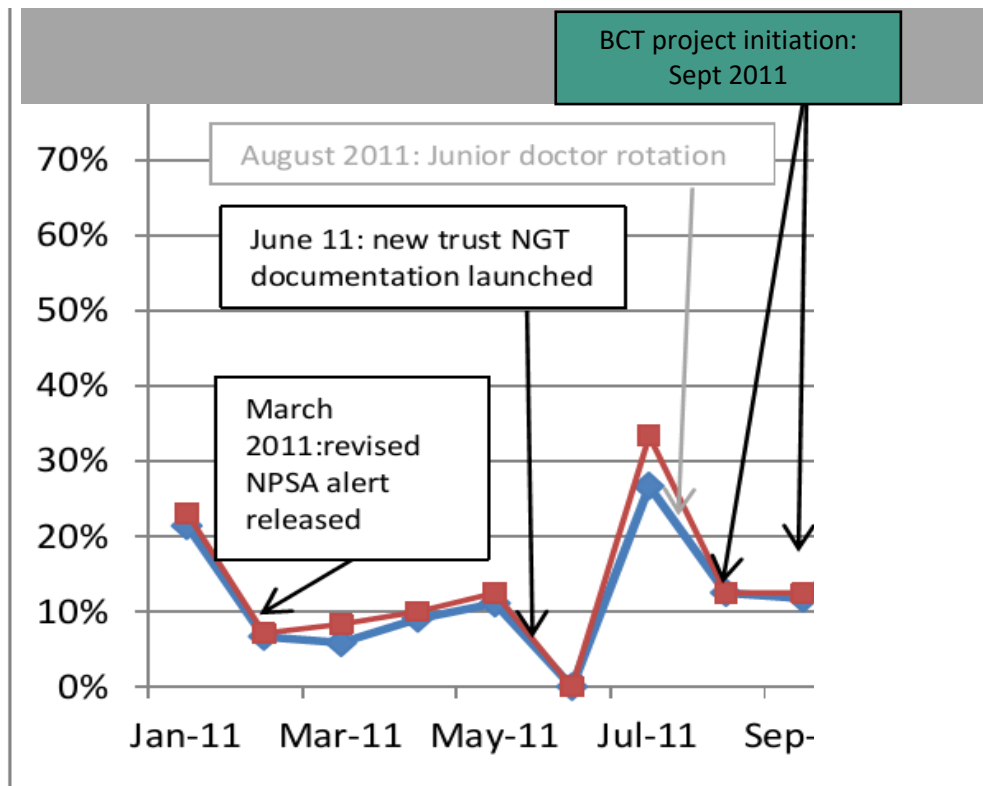


Time series data on target behaviour



% NG feeding tubes with pH testing as first line

Traditional approach to implementation: hospitals adapt national guidance and disseminate through training

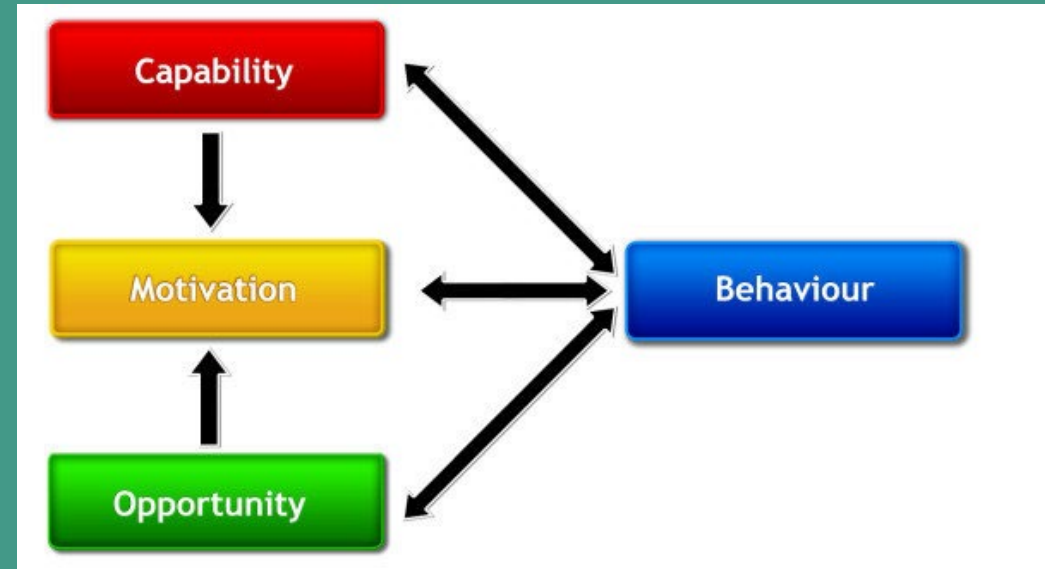


Identifying Barriers to pH use: COM-B Analysis



Quantitative survey of barriers to using pH as first line method

Focus groups with staff to establish barriers to using pH as first line method



Identifying Barriers to pH use: COM-B Analysis



Quantitative survey of barriers to using pH as first line method

Focus groups with staff to establish barriers to using pH as first line method

Capability

Knowledge: Low awareness of guidance and the role and importance of pH testing as a first line method

Opportunity

No readily accessible models of staff members successfully using pH as first line / Doctors override nurses recommendations, especially during busy periods & following rotation

Motivation

Emotion: Staff worried about harming patients if they get the procedure wrong /

Developing the intervention



Capability

Knowledge: Low awareness of guidance and the role and importance of pH testing as a first line method

Capability Intervention

Knowledge: E-learning package developed with an emphasis of the role and importance of pH testing for all staff

Opportunity

No readily accessible models of staff members successfully using pH as first line / Doctors override nurses recommendations, especially during busy periods & following rotation

Opportunity Intervention

Social: Higher grades of staff receive first line of training to change norms / Creation of prompts regarding trust policy to empower nursing staff: Screensavers & posters reminding staff and providing behavioural models

Motivation

Emotion: Staff worried about harming patients if they get the procedure wrong

Motivation Intervention

Emotion: Education: 50% of NG deaths due to x-ray misinterpretation. Screensavers to elicit emotions associated with contributing to a patient's death due to x-ray misinterpretation).

Reducing The Harm Caused By

 Misplaced Nasogastric Feeding Tubes

NHS

National Patient
Safety Agency

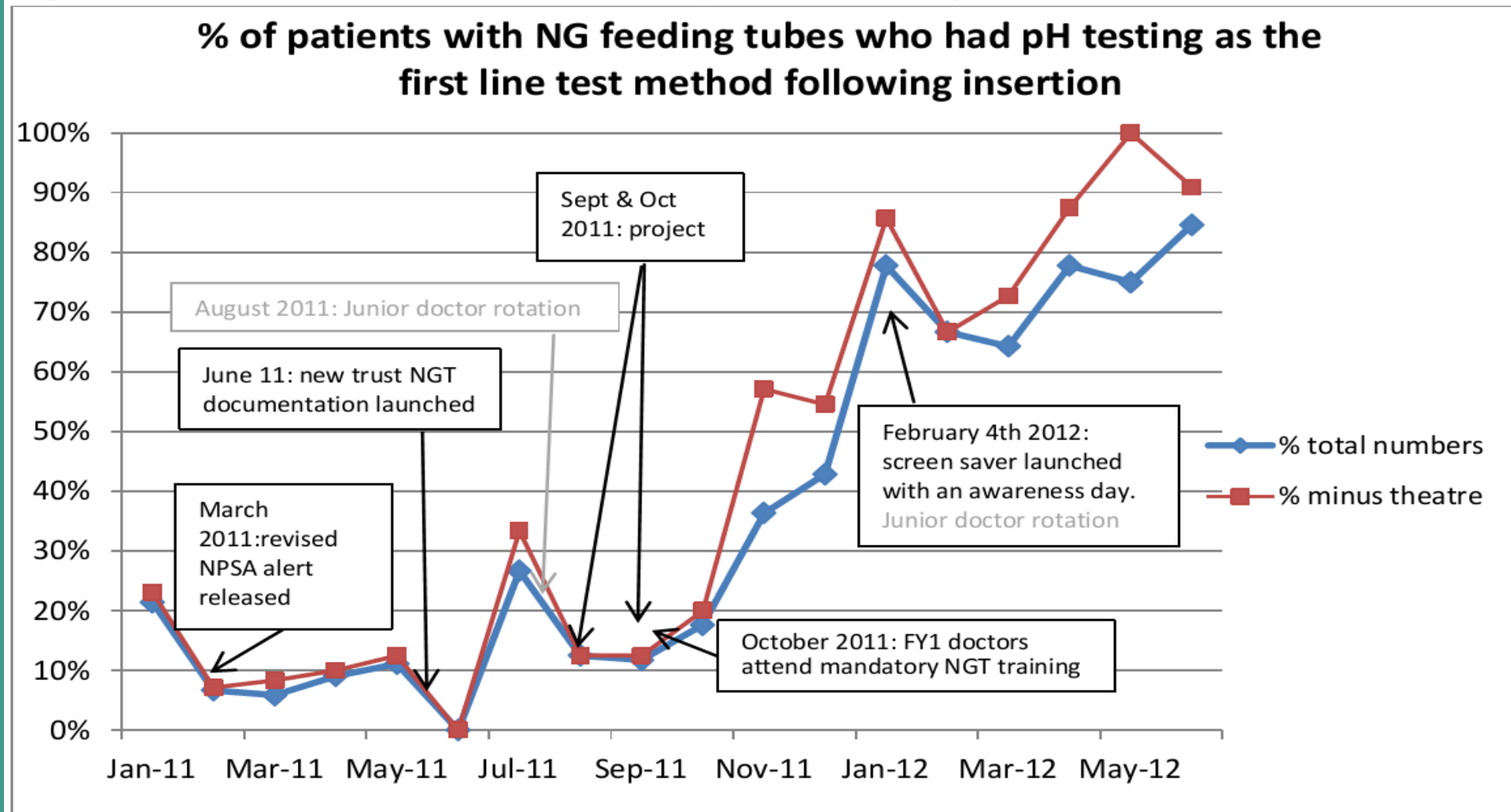
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of feeding into the
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Impact of behaviour change intervention

Figure 1. Time series audit data on use of pH from January 2011 – June 2012



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4 models of utilising behavioural science

1. **Buying it in (e.g. research funding, or external consultancy)**
2. **Baking it in**
3. **Building behavioural science capability through training**
4. **Establishing an internal consultancy**

'Baking it in'

What is it?

- Embedding one or more elements from the 'behavioural science' toolkit into the processes of an organisation
- May require specialist expertise to set-up but may be executed on ongoing basis by non-specialists

Examples:

- Government Communications Services uses the COM-B model to gather insights for campaigns
- Providing checklists for constructing letters to encourage take-up of services, based on decision heuristics

Insights

- Useful when no resource or access to behavioural science expertise, and the role of behaviour in process is clearly defined
- More vulnerable to 'breakage' when organisation changes, and staff turnover

Developing an internal consultancy

What is it?

- Dedicated function within an organisation for applying behavioural science

Insights

- It takes time to establish and embed (at least 2-3 years)
- Align activity to organisations strategic priorities
- Useful to have a mixture of general (e.g. project management, training,) and specialist (behavioural science) competencies
- A dedicated role/team, not simply an add-on to an existing role

Building capacity within an organisation

- Training as a core activity
- Take up is variable, and lower than predicted
- Some elements can quickly be picked up, particularly the concept of identifying behaviours and the COM-B model
- Doesn't do away with the need for central team

Evaluating impact

- Onus on behavioural science teams to 'prove' they have impact (even when other functions are not required to do so)
- Always much harder than people think – helpful to create a logic model for each piece of work, and a programme theory for the unit itself
- External impact teams often do not have knowledge and skills to effectively evaluate behaviour change interventions, internal resource might be helpful

Summary

A learning organisation needs to be able to change the way people behave in response to an ever-changing internal and external context

Organisations are complex systems, and organisational change has all the elements of a 'wicked' problem

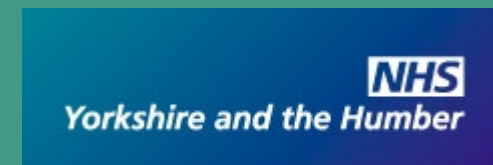
Systems analyses help unravel the issues that make problems wicked, and help identify the levers to press to reshape the system

Behaviour change models help develop effective interventions

The next big question is how to operationalise behaviour change science within organisations to enable it to deliver on its promise

Using the Behaviour Change Wheel to implement NSPA Guidance for NG Feeding

- One strand of a larger project concerned with implementing patient safety alerts funded by the Yorkshire Regional Innovation Fund - 4 areas:
 - Reducing risks of feeding associated with misplaced NG tubes
 - Reducing risk of midazolam injection overdose in adults
 - Reducing risks associated with Gentomicin administration
 - Reducing risks associated with medicine reconciliation
- Project team: Dr. Natalie Taylor, Professor Rebecca Lawton , Beverley Slater, John Wright and Victoria Robbins



Published work using systems approach



Behaviour and Systems

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Abstract

Authors

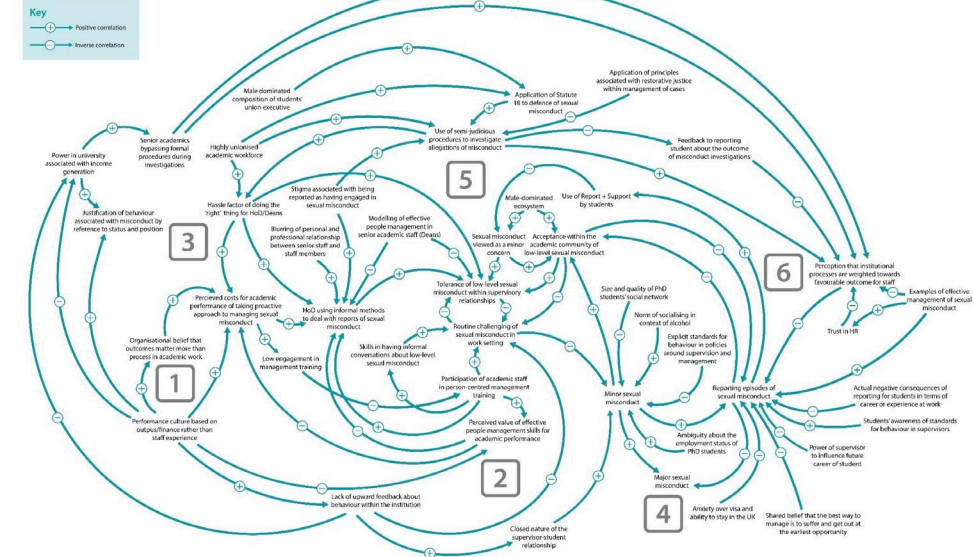
Joanna Hale (Centre for Behaviour Change, University College London, London, UK)

Christopher Jofeh (Welsh Government's Independent Advisory Group on Residential Decarbonisation)

Paul Chadwick (Centre for Behaviour Change, University College London, London, UK)

Behavioural Systems Map

Output from Behavioural Systems Mapping Investigation into factors influencing staff-student sexual misconduct.



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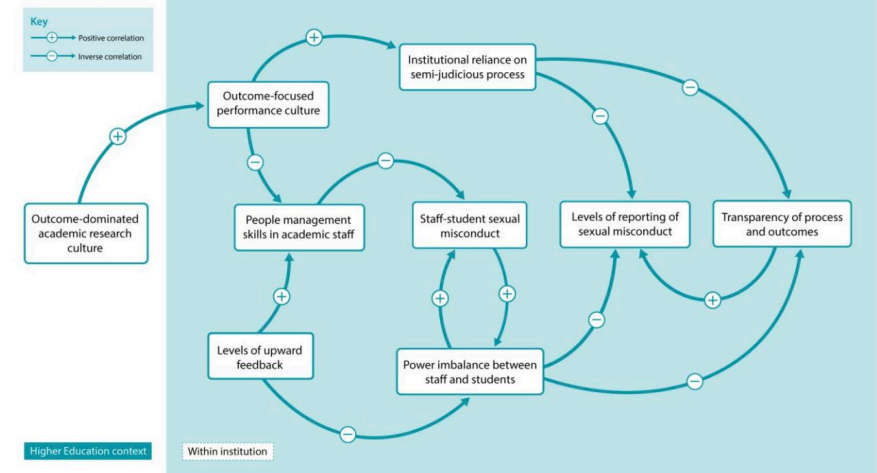
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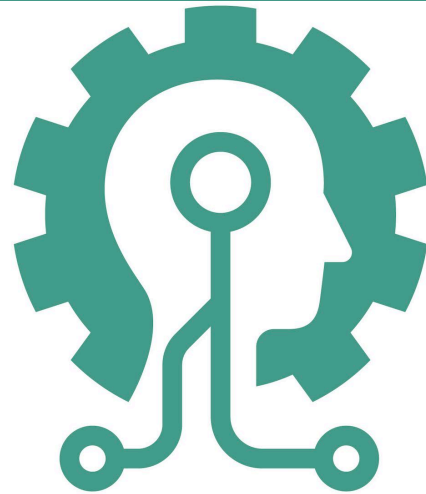
How Behavioural Systems Mapping Can Prioritise Solutions

We utilised Behavioural Systems Mapping to identify the behaviours that can create big systems impact in driving a circular economy.



BEHAVIOUR IS EVERYTHING

Thankyou



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E-learning course coming soon...

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