



**RCSI**

# Psychology of behaviour change

**Lisa Mellon, PhD**

**Department of Psychology, Royal College of Surgeons  
in Ireland**

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE



# Outline

1. Understanding behaviour in context
2. Identifying target behaviours within complex interventions
3. Framework for understanding behaviour change
4. Exercise: Describe target behaviours and link to relevant intervention types



# Health behaviour change

- Is the crucial outcome variable in most health interventions
  - A guideline is a form of intervention
- Changing behaviour is a challenging and complex task
  - Personal experience?
- Identify what actually needs to change?



# Health behaviour change – who are the targets?

Strategies to change behaviour are targeted at three groups of people:

1. Healthy people who require reduction in risk behaviours or increase in health protective behaviours.
2. People with an illness who require behavioural adjustments in order to improve coping or prevent deterioration of their condition.
3. Health professionals engaged in evidence based practice.



# Does behaviour matter?

- ***UK Medical Research Council framework for development and evaluation of complex interventions (2008)***
  1. Is the target behaviour definable?
  2. What needs to occur in practice for change to happen?
    - Interventions should be informed by relevant theories and specified by their component behaviour change techniques
- **NB:** Exploring the mechanisms through which interventions bring about change is crucial to understanding both how the effects of the specific intervention occurred

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Craig et al. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*. 2008;337a:a1655



# Understanding the behaviour

1. Define the problem to be addressed in behavioural terms
2. Select the target behaviour (i.e. the behaviour most likely to bring about change to address the problem)
3. Specify the behaviour in as much detail as possible
4. Understand what needs to shift in order to achieve the target behaviour

# Be specific!

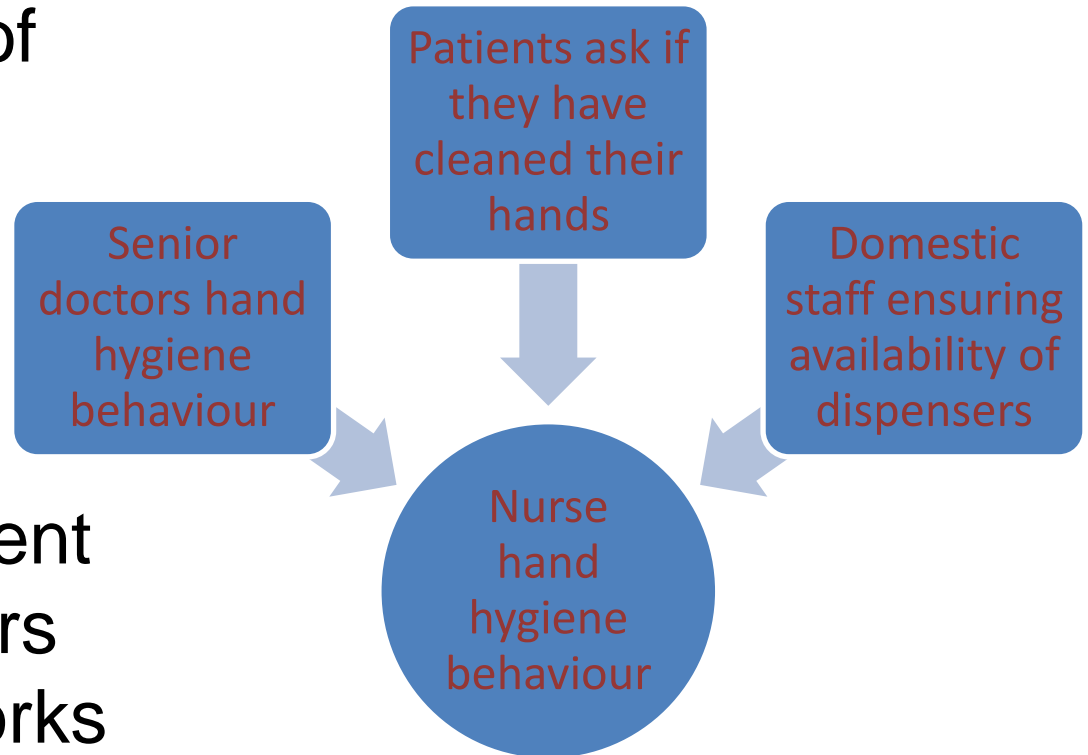
- What
- Who
- Where
- When
- With whom



**Specified in each guideline recommendation?**



- Behaviours do not occur in a vacuum but within the context of other behaviours
- Most behaviours influenced/dependent on, other behaviours from various networks





- **Who** needs to perform the behaviour?
  - All hospital staff
- **What** does the person need to do differently to achieve the desired change?
  - Clean hands using alcohol
- **When** will they do it?
  - During each shift
- **Where** will they do it?
  - On hospital premises
- **How often** will they do it?
- At the start of each shift, after using the toilet, before physical contact with patients, after physical contact with patients, visitors or staff members, after contact with potentially contaminated materials
- **With who** will they do it?
- *Alone*

# Behaviour change interventions

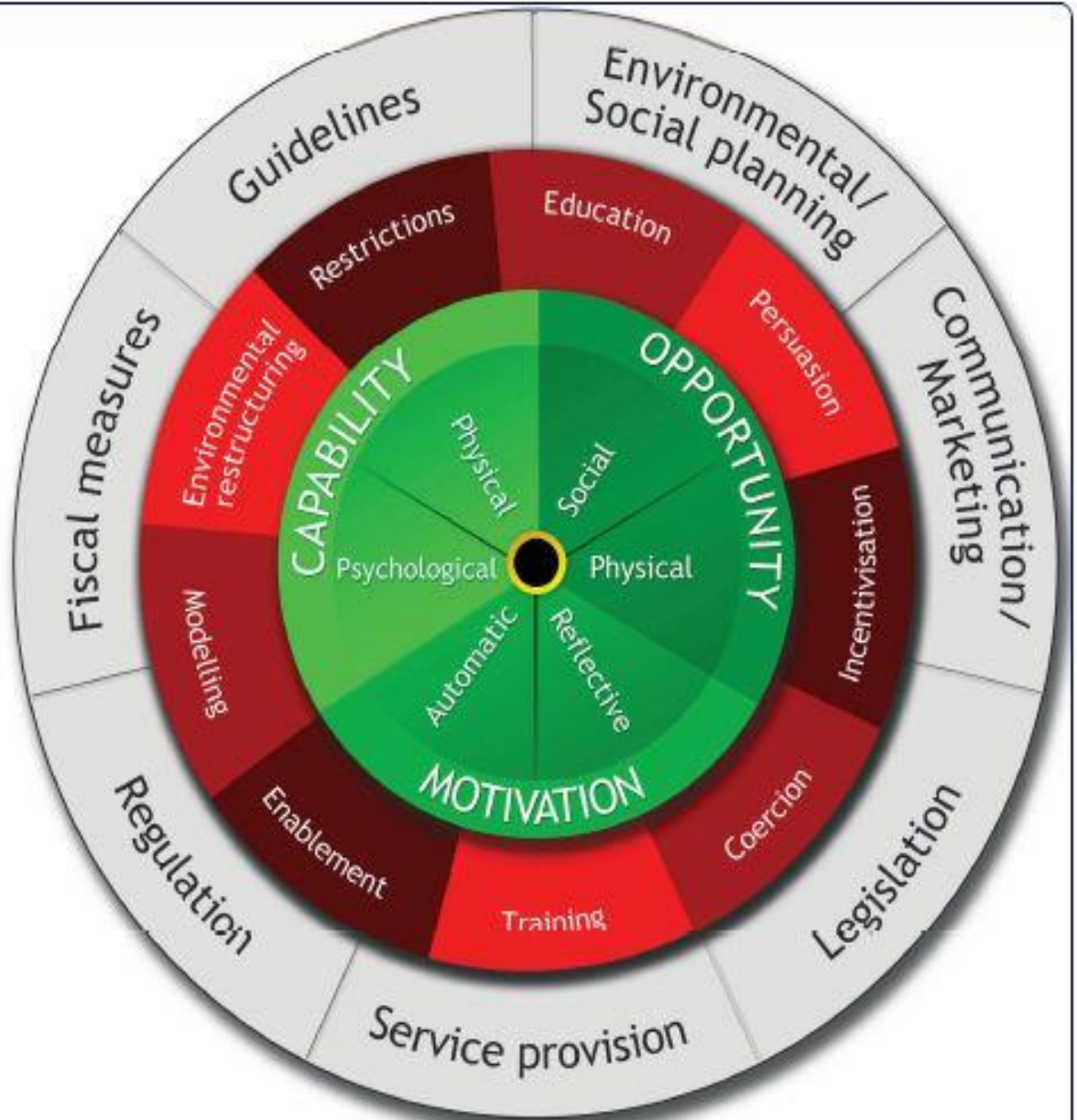
- Process of designing interventions is rarely reported in papers in enough detail to know the rationale for selection and combination of intervention components
- Limited potential for replication of successful interventions



# The Behaviour Change Wheel (BCW)

- Developed by Prof Susan Michie, Director of the Centre for Behaviour Change, University College London.
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- BCW is a synthesis of 19 frameworks of behaviour change interventions:
- Comprehensive approach to intervention design
  - Maps target behaviour onto nine intervention functions
  - Seven policy categories to support their delivery

- Sources of behaviour
- Intervention functions
- Policy categories



# Capability

## 1. Physical capability

- Having physical skills, strength or stamina to perform the behaviour
- *Phlebotomy skills, surgical skills*

## 2. Psychological capability

- Having the psychological skills to perform the behaviour – e.g. comprehension, reasoning
- *knowledge of anatomy, pathology*

# Opportunity

## 1. Physical opportunity

- Opportunity afforded by the environment
- *Take the stairs, availability of MRI / tests*

## 2. Social opportunity

- Social acceptance (culture, family or peer network), cultural milieu that dictates how we think about things
- *Smoking ban, cancer screening / surveillance*

# Motivation

## 1. Reflective motivation (The head)

- Self conscious planning, analysis, decision making
- Beliefs and intentions
- *Decision to buy a house based on price/location*
- *Intention to stop smoking*

## 2. Automatic motivation (The heart)

- Emotions and impulses that arise from associative learning or innate disposition
- Impulse and habit
- *Decision to buy a car based on catchy advertising*

## Target behaviour – cleaning hands using alcohol gel

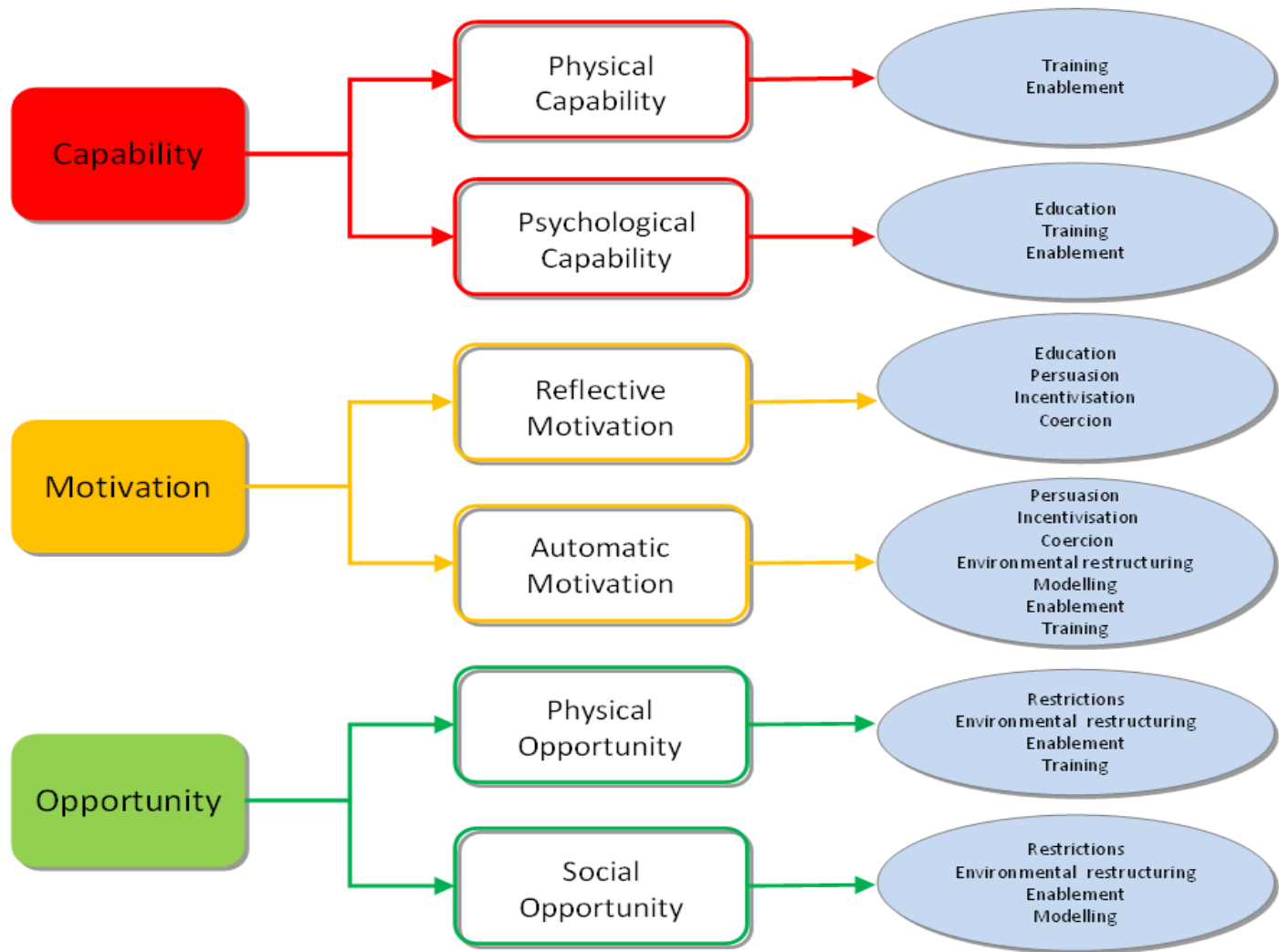
COM-B Component	
Physical capability	No evidence for role of this component
Psychological capability	Knowing the correct technique to clean hands
Reflective motivation	Being aware of the reduction in infection transmission by using alcohol gel
Automatic motivation	Lack of routine or habit
Physical opportunity	Availability of gel dispensers
Social opportunity	Seeing senior health professionals clean their hands using alcohol



# Identifying intervention functions

- Map intervention to COM-B to:
- Maximise **capability** to regulate own behaviour
  - Skills such as goal setting, monitoring and feedback
- Maximise **opportunity** to support self-regulation
  - Maximise social support
  - Avoid social and other cues for behaviour
- Change routine and environment
- Increase **motivation** to engage in desired behaviour
  - Reward change
  - Develop appropriate beliefs
  - Develop positive feelings about changing

<b><i>Intervention function</i></b>	<b><i>Definition</i></b>	<b><i>Example</i></b>
<b>Education</b>	Increase knowledge or understanding	Provision of information
<b>Persuasion</b>	Using communication to induce positive or negative feelings or stimulate action	Visual imagery
<b>Incentivisation</b>	Creating expectation of reward	Payment per referral
<b>Coercion</b>	Creating expectation of punishment or cost	Price increases
<b>Training</b>	Imparting skills	Training courses
<b>Restriction</b>	Using rules that limit engagement in the target behaviour or competing or supporting behaviour	Prohibition of behaviour in certain locations
<b>Environmental Restructuring</b>	Changing the physical or social context	On screen decision support systems
<b>Modelling</b>	Providing an example for people to aspire to or imitate	Community role modelling
<b>Enablement</b>	Increasing means/reducing barriers to increase capability or opportunity	Behavioural or medical support



Policy category	Example
Communication/Marketing	Mass media campaign
Guidelines	Producing and disseminating a treatment protocol
Fiscal measures	Increasing tax
Regulation	Establishment of voluntary agreements
Legislation	Prohibiting sale or use
Environmental restructuring	Town planning
Service provision	Establishing support service in workplace

# Exercise

1. To describe target behaviours
2. To identify the components of target behaviours (using COM-B where possible) from highlighted barriers to behaviour change
3. Map the identified behavioural component to a suitable Intervention function



# Task 1: Delivery of smoking cessation services to in-patient smokers

- WHO:
- WHAT:
- WHEN:
- WHERE:
- HOW OFTEN:
- WITH WHOM:



# Management of post-natal depression in primary care:

*Implementation of evidence-based guidelines for primary health care professionals in the management of post-natal depression*

## Target behaviour

Health care professional adherence to guidelines

## Barriers to change

Awareness of guidelines  
Awareness of local expertise  
Skills to manage expectations

## COM-B:

:

## Intervention function(s)::



# Management of non-specific low back pain:

*Implement evidence-based guidelines for the management of acute non-specific low back pain in primary care*

## Target behaviour(s):

- Restriction of ordering x-rays unless a fracture is suspected
- Advise patients with non-specific low back pain to remain active as this reduces pain and disability

## Barrier(s):

- Lack of communication skills for reassurance
- Consequences of not missing underlying pathology
- Forgetting to advise patients to stay active

## COM-B:

## Intervention function(s):





# Discussion

**Examples from your own work?**



# Useful references

- Craig et al. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*. 2008;337a:a1655
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