The Behaviour Change Wheel: a system for designing effective interventions

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Purposes of communication: the example of pandemic flu

- In terms of public health, the ultimate purpose of communication is to change behaviour
- Increase **knowledge** and **understanding** for its own sake?
  - **Purpose: social and political**
- Increase knowledge and understanding in order to change health-related **behaviour**
  - **Purpose: reduce disease transmission and severity**
Behaviours

- After vaccines, changing behaviour is the most important factor in reducing harm caused by influenza
- Vaccines, themselves, depend on behaviour
  - Health professional offers
  - Attendance at clinic
- Respiratory and other behaviours
- Social distancing behaviours

Communicating to change behaviour

- Health Education model
  - Give information
    - About risk and what to do
    - Increase worry

- Other influences on behaviour
  - Skills and confidence
    - That people can conduct the recommended behaviours
    - That the recommended behaviours will be beneficial
  - Mental models
    - about illness, risk, behaviours
  - Context
    - Social influences and environment
If you could see flu germs, you'd see how quickly they spread.

Cold and flu germs can live on some surfaces for hours. To protect yourself and others this winter, always carry tissues with you and use them to catch your cough or sneeze. Bin the tissue, and to kill the germs, wash your hands with soap and water, or use a sanitiser gel. This is the best way to help slow the spread of flu. For more information visit www.nhs.uk

Catch it. Bin it. Kill it.
A system for designing effective interventions

1. Start with the target behaviour
   • Precise description
   • Understanding of its determinants
2. Consider full range of possible interventions and policies
3. Identify specific behaviour change techniques
4. Design communication strategy to support the above

Effective communication requires …

• An analysis of the target behaviour
  – Who needs to do what, when and how
  – Understanding as to why desired behaviour is not occurring

• A method for selecting types of intervention and specific behaviour change techniques

• Modes of delivery of behaviour change techniques
  – Media, messages, images, source
An analysis of the target behaviour: Why are desired behaviours not happening?

- Use theories of behaviour change
- We have many relevant psychological theories and models of behaviour change
- Not generally used in communications design and delivery
- Need to integrate and simplify to make useable

Behaviour change theories: 3 groups

- **Motivational**: explain behaviour of people who have not yet established intention
  - e.g. Theory of Planned Behaviour, Operant Learning Theory

- **Action**: explain behaviour of people who have identified a need to change
  - e.g. Control Theory/Self-regulation Theory

- **Organisational**: explain ‘institution’ level change
  - e.g. Diffusion of Innovation
Integrating and simplifying behaviour change theory: A consensus study

- Participants
  - 32 international researchers in health psychology and implementation science
- 33 theories and 128 constructs generated
- Simplified into 12 domains
- Interview questions associated with each domain


Results: Theoretical domains

1. Knowledge
2. Skills
3. Professional role and identity
4. Beliefs about capabilities
5. Beliefs about consequences
6. Motivation and goals
7. Memory, attention and decision making
8. Environmental context and resources
9. Social influences
10. Emotion
11. Action plans
12. Nature of the behaviour
Behaviour emerges from interactions between three necessary conditions ...

**Capability**
- Psychological or physical ability to enact the behaviour

**Motivation**
- Reflective and automatic mechanisms that activate or inhibit behaviour

**Opportunity**
- Physical and social environment that enables the behaviour

“COM-B system”

**Motivation:** reflective and automatic

- Beliefs about what is good and bad, conscious intentions, decisions and plans
- Emotional responses, desires and habits resulting from associative learning and physiological states

*Reflective-Impulsive Model, Strack & Deutsch, 2004*

*PRIME Theory of Motivation, West, 2006*
Need a framework for designing interventions with following criteria:

1. Comprehensive coverage
2. Coherence
3. Clear link to a model of behaviour

Useable by, and useful to, policy makers, service planners and intervention designers

Behaviour at the hub .... COM-B
Interventions and policies

Interventions:
activities designed to change behaviours
Intervention functions

Policies

- Feasibility, acceptability, cost effectiveness

Steps
1. Analyse behaviour using COM-B
2. Link to possible intervention functions
3. Select intervention functions
   - Feasibility, acceptability, cost effectiveness
4. Choose specific behaviour change techniques
5. Select supportive policies

Applying this system to designing behaviour change interventions
Behaviour Change Techniques (BCTs)

- “Active ingredients” within the intervention designed to change behaviour. They are observable, replicable and irreducible components of an intervention. Can be used alone or in combination with other BCTs.
Conclusion: a system for designing effective interventions

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For more information

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